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Drawing on the traditions of oral history and general interpretivist qualitative research, this study sought to understand how current work-based education experiences inform contemporary students' attitudes about and success in high school. First, I collected data about the history of work-based learning in North Carolina from experts and professionals in the Career and Technical Education (CTE) field using oral history methods. In addition, I used general interpretivist qualitative research methods in seeking answers about how today's students experience CTE, how those experiences impact students' attitudes about post-secondary plans, and how these results varied based on the race, ethnicity, and gender of the participants. Data for the study of contemporary students were drawn from interviews, focus groups, and workplace observations of twenty public high school students participating in a form of formal work-based learning called Career and Technical Education (CTE) Internships. I analyzed the data by applying a priori codes (developed from a theoretical framework guiding this study) and open codes in order to identify emergent themes.

The results of the oral history research showed that work-based learning programs have continued to evolve over time, but that trends in the 1990s and early 2000s show movement away from proven programs. More recent efforts advocate a return to formal work-based learning structures (such as internships and apprenticeships) that provide more opportunity for secondary student participation. The results of research with current student participants showed that they felt the CTE Internship generally impacted

their high school experiences in a positive way. They stated it was productive, contributed to a sense of empowerment, prepared them for real world experiences, helped develop unique relationships, and allowed them to develop a sense of responsibility. Contrastingly, a few participants expressed reservations about the value of the experience, and addressed the difficulties of balancing the demands of work and academics. Also, some students identified negative pressures and expectations associated with gender and race while participating in the internships. The positive trends reported by the participants were consistent with the perspectives of those who were interviewed for the oral history of work-based education in our state.

This study has practical implications for the design of work-based learning in the public school district in which the study was conducted. While most of the participants praised the CTE Internship as a positive one, there were some who did not feel this way. In fact, there were two who openly expressed the sentiment that the experience was simply an easy way to earn a high grade and boost their grade point average. Four others cited negative experiences related to gender inequality and racism while participating in the program. These results indicate that several important structures need to be considered when administering this program: (a) Student participation must be voluntary. The CTE Internship should remain an elective offering to students and not be tied to any requirements for the completion of high school. It should also not be used as a requirement to incentivize or exclude participation in any academic tracks or pathways of studies; (b) Faculty advisors should carefully and regularly monitor students while they participate in the program. Faculty members should be particularly aware of students'

vulnerabilities related to race, ethnicity and gender in the work-place setting; and (c)

Program administrators should carefully monitor all aspects of the program, specifically the supervisory roles of faculty and work place supervisors, in order to maintain program integrity and to promote positive outcomes.

Future research into work-based education should explore how these same questions apply to other models of work-based learning, including comparisons to shorter-term experiences like job-shadowing, and longer-term experiences like apprenticeships. Additional consideration should be given to how the socio-economic status of students factor into participation and outcomes in these same experiences.

READY FOR WORK AND BEYOND: A STUDY OF THE IMPACT OF WORK-
BASED EXPERIENCES ON SECONDARY STUDENTS

by

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I dedicate this dissertation to my wife, Marcia, for her support and love.

I also dedicate this dissertation to my children, Danica, Adrianna, Sofia and Brodie, all of whom I hope will never cease to continue learning during their personal journeys through life.

Finally, I want to recognize my father and mother, each of whom did their very best to put me on a path of learning for life.

APPROVAL PAGE

This dissertation, written by Stanley Winborne, IV, has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

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CHAPTER I

INTRODUCTION

Work is a great experience for our students, but connecting school to work is a life-changing experience.

~ Dr. June Atkinson, Former State Superintendent NC Public Schools

My professional background and experiences in public education have largely existed in the domain of secondary education. During this time, I have endeavored to support and prepare high school students for opportunities beyond graduation. Engaging students at this level can be challenging; often times they fail to understand the purpose or relevance of their studies, and subsequently miss a critical window of opportunity in their lives. One specific area that I find particularly promising at overcoming this challenge is in Career and Technical Education (CTE). CTE is a separate area of curricula offered in secondary school that focuses on different program areas related to sectors within our economy. Students can choose from a variety of elective courses, co-curricular clubs, and work-based learning experiences. The eight fields of study in North Carolina are: Agriculture Education; Family and Consumer Sciences; Health Sciences; Career Development; Business, Finance and Information Technology; Marketing and Entrepreneurship; Technology, Engineering and Design; and Trade and Industrial Education (North Carolina Department of Public Instruction [NCDPI], n.d.d).

For many, CTE still has a stigma that was earned in the middle and latter part of the 20th century as a course of study for those who would not attend college (Gordon, 2014). In fact, CTE or ‘Vocational Education’ had previously been identified as a contributor to tracking students into courses of study that “seem to be related to the racial and ethnic makeup of a school’s population” (Oakes, 1985, p. 159). In some cases, this may have resulted in two separate tracks: a more rigorous academic track leading toward opportunities for higher education for White students, and a less rigorous vocational course of study that steered students of color toward blue-collar or low-skill jobs.

Much has changed in recent years with the curricula offerings and way that students now choose their high school courses. Today in North Carolina, all CTE courses are considered ‘electives’ and many of these courses are highly advanced and offer honors and AP weighting in students’ grade point averages. Some examples of these types of courses include Biomedical Engineering, Game Art Design, Electronics, Business Law, Soil Sciences, Computer Programing, and Animal Sciences. Currently, there are 214 total course offerings in the state’s curriculum (NCDPI, n.d.d). As a district-level administrator of secondary and CTE programs, I find that today’s modern and vast CTE curricula, hands-on learning activities, and co-curricular opportunities are a motivating force for many students and a practical complement to their core content studies. Additionally, CTE provides avenues for students to explore the world of work, which can be a very different experience from the traditional high school setting, even for those on a university or college track. Regardless of whether students decide to enter the workforce immediately after graduation, pursue a technical or college degree, or join the

military, secondary students need opportunities to experience and experiment with what awaits beyond graduation day.

Problem Statement

Although the specific characteristics of work-based study have been established, research related to outcomes and experiences of work-based experiences for secondary students is minimal. This absence of research is particularly true when searching for the nuanced factors regarding work-based experiences that contribute to students' attitudes and experiences in secondary school, and the impact these experiences have on students' successful completion of high school, as well as their plans beyond. However, there are studies that suggest a general positive correlation between students participating in CTE coursework and their career plans (Richard, Walter, & Yoder, 2013).

Internships, apprenticeships, and cooperative work-based experiences have existed for more than a century and are historically the hallmark of vocational education programs in the United States for skilled and semi-skilled trades (Gordon, 2014). These activities play important roles in educational systems throughout the world. Many successful European and Asian educational ministries are benchmarked for the ways in which they incorporate formal work-based experiences into the requirements for matriculation through secondary education (Hoffman, 2011). In fact, "compared to 12 other countries, students in the United States spend the least amount of time learning in a work setting. Furthermore, WBL opportunities for American students are not available to all who want them, and they vary widely in quality. Schools [in the United States] do not

have systematized connections with employers, nor do employers see it in their self-interest to provide work-based learning” (Alfeld, Charner, Johnson, & Watts, 2013, p. 3).

Program areas in Career and Technical Education in the United States continue to evolve and expand. CTE is currently one of the few areas where educational funding in our state has increased in the past several years (Advance CTE, 2016). State and federal funding and grant allocations for CTE across the nation have increased marginally over the past five years, despite the recent climate of shrinking resources (Association for Career and Technical Education [ACTE], 2015). While the CTE curriculum is expanding and modernizing, there are still many pressures embedded in educational policy that prevent the integration of practical skill development into the regular school day.

Real world experiences and meaningful curriculum projects are often obsolete because their format does not support the test regimen mandated by their school districts. As a result, any request to deviate from a script that is focused on skill and drill strategies is often met with resistance from the administration. (Ponder, Veld, & Lewis-Ferrell, 2011, p. 46)

Furthermore, research suggests that the common refrain heard from students about their struggle to make connections between school and “real world” applications may help in closing the achievement and skills gap (Gordon, 2014). As Doolittle and Camp (1999) noted,

If the building of knowledge is to enhance one’s adaptation and functioning, then the knowledge attained (i.e., content and skills) must be relevant to the individual’s current situation, understanding, and goal. This relevancy is likely to lead to an increase in motivation, as the individual comes to understand the need for certain knowledge. Ultimately, experience with relevant tasks will provide the individual with the mental processes, social information, and personal experiences necessary for enhanced functioning within one’s practical environment. (p. 4)

Traditional public education at the secondary level has tended to rely on instruction delivered in a classroom setting that focuses mostly on procedure.

“Unfortunately, it is too often the case that the learners do not accept the goal of the instructional program, but rather simply focus on passing the test or putting in their time” (Savery & Duffy, 1995, p. 4). Secondary schools also currently operate on a daily schedule that addresses content areas or disciplines in isolated subject areas during separate class periods. The primary emphasis of these courses is on acquiring content knowledge, as evidenced by the types of standardized summative assessments that are administered to our students (Jensen, McDaniel, Woodard, & Kummer, 2014). While project-based and problem-based learning are increasingly encouraged, much of what high school students do in school still very much exists inside the school building. Providing more work-based learning experiences could provide students an opportunity to participate in a non-traditional learning experience in a very authentic setting. This in turn, could help balance the types of activities secondary students participate in, allowing for more engaging and effective ways to support what is being taught in the regular classroom. All of this could ultimately lead to a more well-rounded and successful student, who “can integrate a variety of skills and competencies that will be demanded in the high performance workplace of tomorrow” (Gordon, 2014, p. 290).

Consider the following vignette that provides a research and practitioner-informed portrait of what could lie ahead for secondary students. While fictional, it portrays a scenario centrally related to this topic and illustrates how traditional instruction could be linked to work-based learning:

The year is 2023. Brodie, a 17-year-old boy living in rural North Carolina, rises to start another school day. He showers, grabs some breakfast and leaves his home, telling his automated vehicle to carry him to his local high school in the nearby small town. He arrives in the parking lot of his high school, and greets some friends as they make their way toward the entrance to the school. However, instead of heading inside to classrooms, he hops on a waiting shuttle mini-bus, which takes him and about twenty-five other students on a short drive to their first actual instructional activities of the day. The bus covers about 14 miles in its 30-minute route, stopping at five different locations to drop off the students. The first stop, a multinational company headquartered in Israel, is a facility that produces synthetic nonwoven fabrics for baby diapers and hygiene products. Three students get off the bus there. One of them heads to the Human Resources department, one to Quality Control, and another to the Logistics offices. The second stop is the regional medical and hospital facility where five students disembark. Four head to the main nurses' station, and one heads to the laboratory facility. Next stop: the school district's Information Technology main offices and infrastructure facilities. Two students get off the bus there and head into the main server room to meet their supervisor. Following that stop, the bus then pulls into the parking lot of a 1.5 million square-foot factory that produces a variety of cosmetic and beauty products for markets across the globe. Seven students file off the bus there and head into the production area where their teams of co-workers await. Finally, it's Brodie's turn, and he bounds off the bus where he will spend the first half of his school day in an advanced manufacturing facility. The modern factory where he is assigned produces components

for automatic transmissions for a Korean automobile manufacturer. His classroom most mornings is actually an assembly line, where he will join a production team comprised of an engineer, two technicians, and a mechanic. Together, they monitor the sophisticated robotic equipment that will precisely measure, cut, and mill pieces in the automated assembly process of spindles, bearings and gears. During his three-hour shift, Brodie works closely with the other full-time employees who coach him on how to monitor the performance of the computerized robotic equipment that is doing all of the work. He helps run diagnostics on the complex machinery and when necessary, helps the technicians and mechanics make adjustments or repairs to the multi-million-dollar machines.

The bus arrives shortly before mid-day on its reverse route, and takes Brodie and his classmates back to school. After a morning of work-based learning activities, it's time to return to the traditional school environment, where they then head into the cafeteria to grab some lunch before the last three classes of the day. This semester, Brodie is taking English IV, Calculus and an elective CTE course called "Engineering/Robotics Design." If everything goes as planned, Brodie will only have one more year before he finishes high school. Once that happens, he will have completed his high school diploma, an industry certificate in Mechatronics, and log over 500 hours of on-the-job training. He might take a job as a technician or mechanic in one of the local advanced manufacturing facilities where starting wages are near \$30 an hour, or he might decide to enroll at either the local Community College Mechatronics program, or at his State University in the School of Engineering and Robotics, where a variety of

scholarships and fellowships await in both fields of study. His other classmates in high school who participate in the hybrid work/study program also face similar prospects; local employers are eager to hire and continue grooming young employees who have already proven their skills, and possess a desire to work in specific high skill sectors of the economy. When asked about the experience, Brodie explains, “I finally feel like the stuff I’m learning in school is helping me for something real in life. I like learning about what work is like. I might not be in the robotics field forever, but at least now I know what it is like in the real world before I leave high school.”

This future scenario reveals the possibilities that exist in how we might re-structure the secondary learning experiences for students. While in some ways this approach may seem innovative or unconventional, examination of the historical development of work-based learning and current day student experiences could provide insight into practical and effective models to consider.

Research Questions

The purpose of this study is to explore the historical development of CTE in North Carolina and how CTE work-based experiences impact today’s secondary students’ attitudes and plans. Specifically, it seeks to understand students’ attitudes about, success during, and plans following participation in work-based experiences.

This research study seeks to answer the following questions:

1. How do today’s student work-based experiences and practices relate to the historical progression and development of CTE in North Carolina?

2. How do work-based experiences inform student attitudes about and success in high school?
3. How do work-based experiences affect students' post-secondary plans?
4. How are student's attitudes informed by their gender, race, and ethnicity?

Throughout this study, I attempted to establish alignment and congruency with my research questions, the conceptual framework, the interview protocols, and the way in which the findings, discussion and conclusion are framed. The research questions themselves were developed based on my thoughts and curiosities established during my review of related research, and my prior knowledge of this particular field of education.

Overview of Research Methods

In undertaking this research, I first conducted oral history interviews with nine expert practitioners in the field of CTE to learn more about the history and practices of work-based learning in the public school system in North Carolina. This information provided a rich context in which to better understand the current day students' voices. The interviews were conducted over several months and varied in length and frequency. Each of the individuals who were interviewed had extensive experience serving in leadership roles at varying levels of the state's public school system.

Following the oral history interviews, I then employed a qualitative general interpretivist approach to gather data from students who were currently participating in work-based learning experiences. Using a semi-structured protocol, I interviewed 20 public high school students participating in CTE internships in order to understand the impact of participants' reported experiences as they related to their attitudes about high

school and their post-secondary plans. In addition to individual interviews with each of the twenty participants, I conducted two follow-up focus groups with a sub-group of the participants, and then observed four of these students in their work place setting.

The experience of completing work-based education is not common to many students as they progress through high school. For those students who do have the opportunity or inclination to participate, I wanted to understand the way it informs their thoughts and perceptions about high school, and how it impacts the formation of their plans beyond graduation.

Key Concepts and Terminology

I will explore several key concepts and terms related to this topic in this study. In this section, I define and explain these central elements of my research.

During its history, **Career and Technical Education (CTE)** has been previously referred to under different names, first as Vocational Education, and then as Workforce Development. CTE programs today are now state and federally funded and must follow specific sets of curriculum and program guidelines, most notably set forth in what is known as the Perkins Act (ACTE, n.d.). First enacted in 1984, the Perkins Act is the federal law at the heart of CTE, and provides basic CTE funding in K-12 public education in the U.S. (Meeder, 2008). While offered statewide, CTE programs are implemented in varying degrees in middle and high schools in our public education system in North Carolina. In most cases, the breadth and scope of these programs vary based on the local workforce needs, the size of the school district, and the pool of skilled teachers available in each program area.

Voc-Ed, or Vocational Education, is additional terminology that is sometimes used interchangeably with CTE. In North Carolina, it was used as the proper name to reference the program of study for preparing students for a specific trade, craft or profession. It was replaced with the title CTE in the 1990s (Winborne, 2015). Voc-Ed is also sometimes used as a program that was “stigmatized as a high school track for students with low levels of academic achievement, special needs, or behavioral problems” (Gordon, 2014, p. 207).

A **CTE Work-Based Experience (WBE)** is any planned, formal assignment of a high school student to work in a business or industry setting. A high school faculty member and a work-place supervisor must supervise this assignment. It must also occur for a significant duration of time; it typically lasts at least 135 contact hours (the standard contact hours for a Carnegie unit of credit). The experience can be paid or unpaid, and the student may or may not receive high school or community college credit. Work-based experiences may sometimes be referenced by terms such as internships, apprenticeships, or cooperative work experiences. In North Carolina, the CTE curricula are divided into eight separate ‘program areas’ of study, each of which align with particular segments of the economy or skills needed in our workforce. (Agriculture, Family and Consumer Sciences, Health Sciences, Career Development, Business and Information Technology, Marketing and Entrepreneurship, Technology Education, and Trade and Industry). Teacher licensure, individual courses, co-curricular clubs, and the WBE’s are then categorized under each of these eight separate curricular program headings (NCDPI, n.d.b).

A **CTE Internship** is a high school elective course that exists as part of the North Carolina Department of Public Instruction curriculum offerings. Any public high school may offer this course as an elective. The official course description that appears in the state curriculum bulletin is as follows:

A CTE Internship allows for additional development of career and technical competencies within a general career field. Internships allow students to observe and participate in daily operations, develop direct contact with job personnel, ask questions about particular careers, and perform certain job tasks. This activity is exploratory and allows the student to get hands-on experience in a number of related activities. The teacher, student, and the business community jointly plan the organization, implementation, and evaluation of an internship, regardless of whether it is an unpaid or paid internship. (NCDPI, 2014, p. 49)

There are neither prerequisites for enrolling in this course, nor is there a requirement that students obtain work in a particular field or sector of work. Students work with the faculty advisor, their parents, and employer to establish a suitable location to complete the internship. In order to receive credit for the course, students must complete a minimum of 135 documented hours of work, and satisfactorily complete the requirements as established in a locally-developed grading rubric. The internship experience is an entry-level work-based experience, and is different in other formal arrangements where students take coursework in preparation for the work experience. An example that helps distinguish this is the clinical work requirement for students participating in a Certified Nursing Assistant program.

Success in High School is a phrase participants used to describe a student's positive experience of completing high school in four years, and graduating with a

specific plan for their next steps in life, either by working in a skilled job, two or four-year degree program, or military (Adelman, 2006).

Summary and Chapter Preview

Career and Technical Education has an interesting history in our public education system. The dynamics in determining how to prepare secondary students continues to evolve. Previous tensions between academic and ‘Voc-Ed’ pathways have not completely disappeared. The primary goal of CTE has been to improve the skills of students entering the workforce and to increase the economic opportunities for them during their working lifetime (Gordon, 2014). However, this may not always have been the case for all students. Some have argued that early models of this program have had the opposite effect. “Clearly vocational education along with academic tracking plays a part in restricting the access minority students have to future opportunities” (Oakes, 1985, p. 170). In the past 30 years, significant changes have been made to CTE curricula and program design. Current models of CTE focus on a more inclusive shift toward preparing students for both careers and post-secondary education. “Defining career and technical education as preparation for both college and careers would eliminate the necessity for students to choose one or the other. It would also give schools no reason to separate students into college-bound and non-college-bound categories” (Gordon, 2014, p. 24).

Incorporating work-based education experiences into a secondary student’s menu of experiences could be an effective supplement to the effort to blend these two realms. Getting a taste of employment while in high school could help students bridge thoughts

and attitudes about their future plans related to post-secondary education and their careers. In the second chapter I will identify how prior research in this area has contributed to these notions, and where areas still remain to explore. I will also describe the conceptual framework that I developed to guide my research. In Chapter III, I discuss the methodology employed in this study to gather data regarding both the historical context of CTE and WBE and the current experiences of high school students participating in these programs. I present findings concerning the history of CTE in North Carolina in Chapter IV and I present the findings regarding current high school students in Chapter V. In Chapter VI, I discuss the implications of all of these findings accompanied with the possibilities for future research.

CHAPTER II

REVIEW OF RELATED RESEARCH

Introduction

The purpose of my research was to understand how work-based education experiences inform student attitudes about and success in high school. It also sought answers about how these experiences impacted students' attitudes about post-secondary plans and how these results varied based on the race, ethnicity, and gender of the participants. In this chapter I review the literature relevant to these research questions and identify current trends and issues in research focusing on Career and Technical Education (CTE) and the occurrence of work-based learning practices. I also describe the conceptual framework that I developed to guide my research.

Career and Technical Education research exists dating back to the 1970s (Gordon, 2014). Earlier research referred to its former moniker of Vocational Education, particularly prior to the 1990s. Recent topics of research for CTE vary considerably, (Gordon, 2014) and often concern program design and effectiveness, teacher preparation, student performance, and connections between schools and the workplace. Research also varies widely in scope; it is represented by small, focused qualitative studies at a local level, or broad quantitative studies on a state or national level. Related research has emerged from countries around the world, including educational programs in the Netherlands, Nigeria, Taiwan, Singapore, and Germany (Ryan, 1991). However,

research before the 1990s is quite sparse. Castellano, Stringfield and Stone (2003) took note of the lack of earlier research. Specifically, they stated,

It is ironic that at the very time that national policy is calling for a more integrated and outward looking version of CTE, there have been few scholarly attempts to build bridges from CTE to research on academic components of U.S. schooling. (Castellano et al., 2003, p. 8)

In this review, I discuss five main themes or areas of research that establish context and support my own research:

1. Program structure and participation data;
2. CTE and Constructivism;
3. CTE and Student Impact;
4. Post-High School Destinations;
5. Concerns with Tracking and Vocational Education

Program Structure and Participation Data

CTE is an evolving field of education. Ultimately, it developed during the 19th and 20th centuries, with some characteristics related to European models of education. These connections stem from teachings and philosophies developed by Jean-Jacques Rousseau (1712-1778) and Johann Heinrich Pestalozzi (1746-1827). Both of these individuals were proponents of the concept of ‘manual training’, which they believed would contribute to social and individual improvements (Gordon, 2014). In the earlier part of the 20th century, the skilled trades had an extensive system of apprenticeships that were practically a formal form of education. In the mid 1990s, public education began offering vocational education courses. Federal and state legislation also encouraged and

developed the innovations that have ultimately led the existence of modern CTE programs.

Over the past several generations, student participation in CTE has evolved in many ways. Certain patterns and trends can be seen, which reflect both program design, and societal norms. Overall, trend data indicates that secondary student participation in CTE courses has been polarized into particular traditionally male or female career areas. (Gordon, 2014). Agricultural Education and Home Economics were the progenitors of modern CTE, and had clearly defined roles for males and females, which matched the societal structures of the early 20th century. As public education evolved, the curricula expanded and became more inclusive. However, this inclusivity has not reached every program area or employment sector. There are still traditional areas of the economy that are dominated by certain genders, and the CTE curriculum tends to mirror society in this fashion (Gordon, 2014). For example, males dominate the majority of careers in the areas of trades and industry (construction, welding, automotive technologies, etc.), while the majority of students in the health sector are female (nursing, lab techs, etc.). These gender concentrations also exist in the secondary schooling areas of CTE (Gordon, 2014).

Certain program areas in CTE also tend to segregate based on race and ethnicity as well. African American and Hispanic student enrollments concentrate more in the areas of Trade and Industry as well as Family and Consumer Sciences, while White student enrollment dominates the areas of Agriculture Education and Technology Education. Participation data over the past five years indicates this racial and ethnic polarization is lessening, but it is still pronounced (NCDPI, n.d.d).

Overall student participation in CTE course work is expanding, and the overall distribution of participation by ethnicity and gender is trending toward a balance closer to the actual population (see Table 1).

Table 1

Student Participation in North Carolina Five-year Trend

Demographic	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014
White	274,830	270,714	262,197	268,252	296,738
Black	149,492	141,844	134,478	132,957	153,049
Hispanic	38,694	45,485	47,206	51,619	72,135
Male	258,259	257,741	251,895	258,823	287,607
Female	233,943	231,687	224,287	227,825	275,104
Total*	492,202	489,428	486,648	486,648	562,711

(NCDPI, n.d.c)

* Unduplicated

CTE and Constructivism

Constructivism acknowledges the learner’s active role in the personal creation of knowledge, the importance of experience (both individual and social) in this knowledge creation process, and the realization that the knowledge created will vary in its degree of validity as an accurate representation of reality (Doolittle & Camp, 1999).

Constructivism is in fact a continuum of learning theory, and a great deal of literature has been published about this topic, as it relates to epistemology, psychology, philosophy and sociology.

Generally speaking, constructivism argues that we are not born with our “‘cognitive data banks’ already pre-stocked with empirical knowledge” (Phillips, 1995, p.

5). And similarly, we also do not absorb or acquire neat packages of pre-existing knowledge by some process of data upload. Instead, knowledge comes to us through our active participation and interaction with one another and the world around us. Knowledge, then, is “constructed.” Since this is seemingly the case, why then do we continue to promote educational frameworks that do not promote such active participation and interaction? Instead, we seem to rely on a model that favors the idea of spoon-feeding chunks of memorized facts and algorithms as the means for learning.

A number of authors have provided broad guidelines for the inclusion of constructivist perspectives in career education (Brown, 2006; Doolittle & Camp, 1999). The key difference in the application of constructivism to career education as opposed to career counseling is in the nature of learning, teaching, and assessment. Within a constructivist approach “active learning and engagement in authentic activities takes place in the social culture of practice” (Brown, 2006, p. 11).

In addition to these principles, Doolittle and Camp (1999) emphasize the importance of relevance to the learner’s prior knowledge and present status of content and skills; the importance of formative assessment for the purpose of guiding future learning experiences and of learning outcomes focus on real world competencies; the role of the teacher as guide and facilitator of learning; and the importance of a curricula and pedagogy which encourages multiple perspectives and representations of learning material. This type of approach is consistent with the hands-on, authentic learning activities associated with CTE (Patton, 2005).

Hands-on learning is further evidenced in work-based learning activities, where rote memorization and the accumulation of content knowledge play a much smaller role. Instead, gathering experiential knowledge is the main task. Jong, Jan, Wierstra, and Hermanussen (2006) noted that this can be done by:

- (1) Learning by doing (surrender to experience),
- (2) Guided learning (following instructions and assignments), and
- (3) Reflective learning (experimenting and making sense of experience). (p. 167)

While the concept of CTE still triggers unfavorable images in the minds of many people (Oakes, 2008), the coursework and related opportunities are a possible antidote to the uninspiring traditional lecture-style instruction offered in most of our secondary schools (Gordon, 2014). These courses are typically offered under the headings of individual *program areas* or topics of curricular focus based on sectors of the economy (including Agriculture Education; Business Information and Technology Education; Career Development; Family and Consumer Sciences Education; Health Science Education; Marketing and Entrepreneurship Education; Technology Engineering and Design Education; and, Trade and Industrial Education). In addition, each program area has its own national Career and Technical Student Organization (CTSO). These organizations provide additional opportunities and experiences for students to compete, create and experience outside of the classroom (Gordon, 2014).

The subdivision of specialized program areas and CTSO's are important because it allows the active learning experiences consistent with a constructivist approach to be targeted and directly related to specific sectors of employment and higher education

pathways. Because the CTE curricula are so carefully mapped into these specific areas, it lends itself very well to students being allowed to choose and pursue areas of their own interest. This structure aligns strongly with a constructivist approach.

The learning environment [in CTE] should reproduce the key aspects of communities of practice: authentic activities sequenced in complexity, multiple experiences and examples of knowledge application, access to experts, and a social context in which learners collaborate on knowledge construction. (Gordon, 2014, p. 392)

CTE and Student Impact

While the educational philosophies and instructional design models of CTE are relevant and critical to understanding the evolution of this branch of curricula, I am also interested in research that focuses on the impact of CTE and WBE on secondary students. As such, in my survey of the literature, I did not find a large number of studies directly focused on the impact of work-based experiences on a student's secondary education. In addition, of the studies found, there appears to be very little conclusive data about the relationship between student experiences and their attitudes about high school and their plans beyond graduation.

For several decades, researchers have periodically posed the question of whether vocational education, or CTE, has a causal connection to dropping out (e.g., Agodini & Deke, 2004; Bishop, 1988; Catterall & Stern, 1986; Combs & Cooley, 1968; Grasso & Shea, 1979; Mertens, Seitz, & Cox, 1982; Perlmutter, 1982; Pittman, 1991; Rasinski & Pedlow, 1998, as cited in Plank, DeLuca, & Estacion, 2008). Despite fairly frequent attempts to address the issue, a clear and consistent answer has not emerged. Reviewing

30 years of studies, Kulik (1994) concluded that participation in vocational programs increases the likelihood that non-college-bound youths will complete high school. Specifically, he estimated that any participation in CTE decreased the dropout rate of such youths by about 6%. Despite Kulik's overall conclusion of a positive effect of vocational education on completing high school, some studies have found no such effects (Agodini & Deke, 2004; Pittman, 1991; Plank, 2008, as cited in Plank et al., 2008).

While not directly focusing on dropouts, other studies seem to draw slightly similar conclusions about the correlation between CTE programs and generally positive effects on student experiences. The transformation of CTE programs in recent years has seen a new "approach that contrasts with the narrow focus of the older model of vocational education that often attempted to prepare individuals for specific entry-level jobs" (Plank et al., 2008, p. 348). Instead we now see entire fields of study being offered at the secondary level that can lead students on pathways toward technical, associate, and even four-year and graduate degrees. These expanded opportunities could be one of the reasons for these correlations.

Browder (2007) conducted a qualitative study at an area Career Center in Missouri. In the study, she interviewed two different small groups of high school students, four students who were taking CTE courses, and four who followed a traditional academic track. The results showed that the students taking CTE courses had a more favorable opinion regarding how their studies related to careers. It also indicated that more research needed to be undertaken to confirm these relationships.

Another study of a larger group of slightly older participants by a group of researchers found that CTE had a positive impact on the transition from high school to the workforce. Forty individuals were interviewed (22 men and 18 women) one year after graduating from high school. The data revealed a general theme that the students had a favorable view of CTE as a solid backup plan to formal secondary education plans (Packard, Leach, Ruiz, Nelson, & Dicocco, 2012). Although the study did not differentiate participants' perspectives based on their pathway (employment vs. additional education), the implication in the study was that CTE still contributes to workforce development in a positive way.

A team of three researchers from Johns Hopkins University conducted a large quantitative study that included 9000 students (Plank et al., 2008). The team used data from the National Longitudinal Survey of Youth 1997 to investigate the association of high school dropouts and the high school curriculum. In particular, this study examined how combinations of CTE and core academic courses influence the likelihood of leaving school. It found a curvilinear association with CTE courses and students who were at risk for dropping out. This meant that as the number of CTE courses a student took increased so did their prospects for remaining in high school. However, this effect made an impact only up to a point—after a certain number of courses, the effects stopped increasing. Additionally, this relationship only occurred with students who were age appropriate for their grade level. It did not show the same relationship for older students who may have been retained during their schooling. This study indicates that there may be some significance to the relationships explored in my research questions. Even though

there was not a measure directly linking to work-based experiences, it seems there is a correlation between participating in CTE programs and student outcomes in secondary school.

In another baseline study, Richard, Walter, and Yoder (2013) focused on students who had taken capstone, or advanced level CTE courses. Richard et al. (2013) used data collected from surveys and observations to determine relationships between student outcomes on standardized testing and participating in capstone courses and cooperative workplace experiences. While ultimately the study team's findings were inconclusive, I found it interesting that they were seeking a relationship between success on standardized testing with CTE coursework and work-based learning experiences.

An additional study focused on developing and reviewing a conceptual framework regarding the role of CTE in public education (Rojewski, 2002). This research provided some interesting philosophical perspectives on the value of CTE curriculum. It also discussed the implications for program design, teacher training and the 'clientele' for whom courses were developed. It provided a rich contextual background on CTE that will supports the research questions that are framed for my topic. It also informs how implications and limitations can be applied to any potential findings from research efforts like the one I am proposing. Rojewski (2002) elaborates on the importance of this consideration:

A conceptual framework contains (a) principles, or "generalizations that state preferred practices and serve as guidelines for program and curriculum construction, selection of instructional practices, and policy development," and (b) philosophy, which "makes assumptions and speculations about the nature of human activity and the nature of the world. . . . Ultimately, philosophy becomes a

conceptual framework for synthesis and evaluation because it helps vocational educators decide what should be and what should be different. (Rojewski, 2002, p. 1)

Post-High School Destinations

While related to research concerning the connection among CTE and student learning and achievement, the research into students' post-high school plans and the relationship with CTE is unique. This area of research seeks to find clues into what factors influence secondary students to successfully navigate their way toward completing high school and making plans for life after high school. As previously mentioned, CTE still carries shadows from a former reputation as a sub-set of high school curricula associated with a non-university or less rigorous track for students (Oakes, 2008). Additionally, CTE or its previous term Vocational Education or has been criticized for its role in tracking minority and economically disadvantaged students. One study explored the relationship between tracking in vocational courses and the specific expectations of educators (Lewis & Cheng, 2006). The researchers interviewed high school principals to determine if there was any correlation to this phenomenon. They framed this research in what they saw as the new 'vocationalism', or the recent transformation of Voc-Ed toward the mainstream curriculum. The findings from their interviews with high school principals confirmed some of the negative perceptions, showing that:

Indeed race and socioeconomic status significantly influence both track assignment and principals' expectations in a way that conforms to the principle of self-fulfilling prophecy. The findings did not support the view that ethnic and racial minorities are more likely than White students to be placed in the

vocational track; however, there was strong evidence of such differentiation with respect to the general track. (Lewis & Cheng, 2006, p. 67)

Another more recent study found that indeed African Americans and Latinos participated in CTE at a higher rate than their White counterparts, but also found that the primary predictor for participation was those individuals whose father had a college education (Fletcher & Zirkle, 2009). However, this same study found “that high school curriculum tracking was significantly related to occupational earnings. In fact, students from the CTE track were expected to have higher earnings than their general-track counterparts by \$3,279” (Fletcher & Zirkle, 2009, p. 100). This finding suggests that while minorities are overrepresented in CTE programs, their participation actually improves their earning power in the workplace. The study also mentioned the occurrence of WBEs as a component of the CTE track, and the improved earnings outcomes for the participating students. A Georgetown University study also confirmed the monetary benefits of CTE, and not just as a terminal preparation for careers. Carnevale, Jayasundra and Hanson (2012) found that participation in CTE can accelerate and improve high school students’ eventual progress toward achieving a bachelor’s degree. They found that “the existence of high school CTE programs of study allows students an essential jumpstart and inroads into postsecondary education and training that often lead to middle-class jobs” (Carnevale et al, 2012, p. 8).

Concerns with Tracking and Vocational Education

In earlier years, Vocational Education (Voc-Ed) often carried with it a stigma of a lesser set of curricula, designed for those students who were perceived as either unable,

or unwilling to be challenged academically or pursue post-secondary education opportunities (Gordon, 2014). For many, Voc-Ed was an alternate path of study, and was a clear track towards blue-collar or a career in the semi-skilled trades. Unfortunately, for years this separate track or path was disproportionately assigned to minorities and students of poverty. In one scholarly work, Jeannie Oakes (1985) described the function of Vocational Education as having “been to segregate poor and minority students into occupational training programs in order to preserve the academic curriculum for middle- and upper-class students” (Oakes, 1985, p. 153). She went on to criticize the efforts of Voc-Ed at that time by saying, “It is likely that these programs do not serve the democratic ends most Americans want their schools to achieve” (Oakes, 1985, p. 171).

Additional research by Rosenbaum (1976) demonstrated how the structure of secondary education actually promoted inequality, and did not allow for students to pursue courses of study based on merit. Other research during this same period confirmed some of Rosenbaum and Oakes’s assertions. One study by Gamoran and Mare (1989) examined the effects of academic tracking in secondary schools and considered how tracking affected levels of academic achievement and high school graduation rates among different social groups. The authors concluded that “average rates of both achievement and graduation would be higher if all students enrolled in the college track, but lower if all belonged to the noncollege [Voc-Ed] program (Gamoran & Mare, 1989, p. 1177). Additionally, Gamoran & Mare (1989) reported that non-college programs [Voc-Ed] did not do a better job of keeping kids in school, which was a common claim made by many supporters of Voc-Ed at that time.

Yet more research addresses this same relationship between minority students and Vocational Education, pointing out long-term, deeply entrenched inequities:

A history of being limited to lower-level vocational education programs and occupations may explain any lingering overrepresentation in lower-level vocational education programs. However, it is also possible that Blacks may be underrepresented in the high-level programs due to continuing racism and structural bias. (Arnold & Levesque, 1992, p. 27)

In effect, there was widespread criticism for Vocational Education during this era. Instead of creating opportunities for students, some argued that it effectively blocked a pathway for many, and usually for those who were at a considerable disadvantage to begin with. Since this time, much has shifted with regard to the choices students can make about the courses and curricular pathways available in high school. The CTE curricula have modernized, become more rigorous, and now share the same academic profile of honors and AP course weights (NCDPI, n.d.a). This is due in large part to the much-deserved criticism Oakes (1985) and others brought to bear on the Voc-Ed instructional model of previous generations. In fact, in the preface of the more recent second edition of her seminal work, Oakes now recognizes that some improvement has been made in this regard:

Indeed, the old rigid system of completely separate and explicit academic, general and vocational programs, found in a few of the Keeping Track schools, has now largely disappeared. Students enroll in classes subject by subject, rather than in in a preset program of courses. Many high schools have eliminated the dead-end, general track, and some now have multiple levels of classes that serve students bound for more and less selective types of colleges, allowing schools to claim that all of the students are college prep. (Oakes, 2008, p. x)

Additional progress has been made in ‘de-tracking’ Voc-Ed through the Carl D. Perkins Vocational and Technical Education Act of 1998 (Perkins Act), which made considerable strides in addressing many of the concerns Oakes raised in 1985. The law required that fund allocations be tied to specific performance measures, which included “special populations and gender and equity provisions” (Gordon, 2014, p. 170). In effect, the legislation required Voc-Ed programs to begin collecting program data about particular populations of students and requiring adjustments where inequalities existed. However, these efforts have not alleviated all of the concerns. One policy brief points out that discrepancies exist among states depending on how they choose to set these measures.

Unfortunately these provisions [in Perkins Act] carry little weight on their own. In states where there is a wide variation of expectations for students, CTE programs can still be aligned to less rigorous academic expectations and meet the requirements of the Perkins Act, particularly since there is no clear definition of “rigorous and challenging.” (Meeder, 2008, p. 9)

While it may be true that expectations for students participating in CTE programs vary from state to state, district to district, and even perhaps school to school, the Perkins Act attempted to establish a floor for equitable access to quality curriculum and instruction (Gordon, 2014). While some of the areas of instruction or work-based learning activities in CTE may focus on entry level or low-skill areas, these activities do not necessarily predetermine or limit a student’s career objectives. For example, a university-bound high school student may learn valuable skills while working in a fast food restaurant, where these workers are generally expected to be able to work

collaboratively in teams, manage and resolve conflict, and engage in clear communication. All of these are valuable skills for any student's future career choice.

In my review of the existing literature, I found five main themes that provided context and guided the structure for my own research. They are: program structure and participation data; CTE and constructivism; CTE and student impact; post-high school destinations; and, concerns with tracking and Vocational Education. These different areas that emerged from my survey of the research helped me establish a lens to view my own research. At the center of this topic are the secondary students. They participate in and gain skills and knowledge through CTE and work-based education programs. The outcomes associated with these experiences are influenced by many factors. Some of these outcomes could be related to external factors, and some of these outcomes could be influenced by a student's own personal characteristics or attitudes.

Conceptual Framework

In designing my research, I first established the specific inputs and outputs I wanted to consider associated with student participation in work-based learning. I understood that there was substantial variability involved between and among individual students, but I also felt there were some commonalities involved for all who engaged in these experiences. As Rojewski (2002) explained,

Any conceptual framework for career and technical education must be flexible enough to allow for differences in secondary or postsecondary programs and accommodate changes in the economy and society, but at the same time identify underlying assumptions, beliefs, and values that are consistent for all types of career and technical programs and are not readily subject to change. (p. 3)

Based in part on Rojewski's definitions as well as my review of the existing research, I developed a conceptual framework model (Figure 1) that guided my investigation of this topic. The center of the diagram represents the phenomenon or event of participating in a work-based experience, and the student's movement from left to right through these various aspects characterize and define their experiences. At the top and the bottom of the center part of the diagram are the continuums of instructional learning experiences. With a shift from left to right, the students experience a movement in levels and specificity of content knowledge. On the left side of the diagram are a series of arrows that represent the basic characteristics, or inputs, of the student. They include elements of identity and past experience, which may inform or contribute to a student's trajectory in life. As the student participates in the core experience of this research (the work-based learning experience) he or she then may experience changes in the emotional or social aspects, or outputs, that are then characterized within the arrows on the right side of the diagram.

As stated previously, research discovered in the review of literature on CTE impacted the design of this framework (Rojewski, 2002). The types of instructional practices we employ in our secondary schools indeed impact our students. The question that needs to be addressed is *how* it impacts our students. The philosophical approach we take about the nature of human activity and the world in which we live does matter. Therefore, the outcomes from our educational activities should inform the design we choose. For purposes of this study, the framework was used to inform my interpretation

of the data, including the way I went about designing the interview protocol, as well as determining my a priori and a posteriori coding.

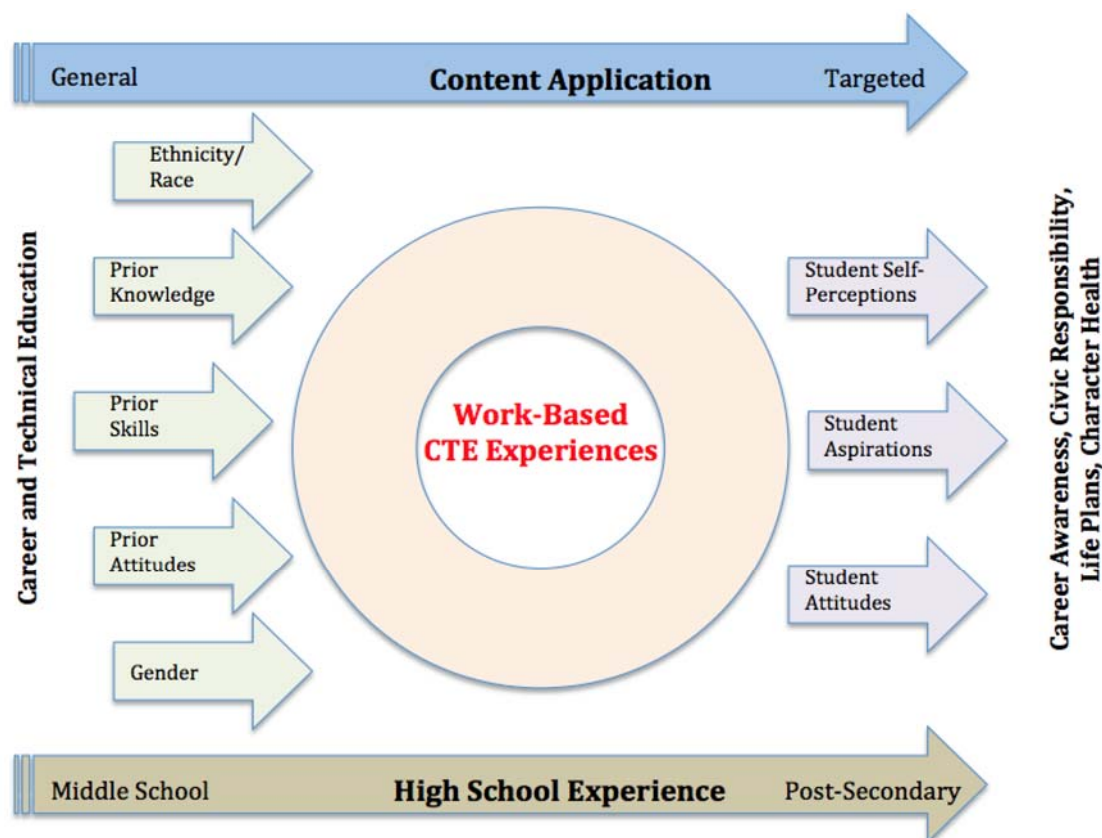


Figure 1. Conceptual Framework for Work-based CTE Experiences.

Conclusion

CTE curricula are a substantial component of our current model of secondary public education. There is considerable research that identifies Vocational Education as historically contributing to promoting inequalities in public secondary schools. While this history reveals critical inconsistencies and inequities for many students, more recent research indicates that CTE is evolving to provide more rigorous and technical

opportunities for students that can help them improve their earning potentials (Fletcher & Zirkle, 2009). The research also provides evidence that participation in CTE coursework can have a positive impact on how students feel about high school. Furthermore, providing students with WBE under the umbrella of CTE is consistent with the constructivist model of learning (Brown, 2006), and there is some confirmation in the existing research that WBE contributes to high school students being better prepared for their futures:

Employers today increasingly emphasize that academic and technical skills are not the only skills needed by students in order to enter the workplace. Today's high-performance workplace requires a diversity of general skills, such as teamwork, problem solving, positive work attitudes, employability and participative skills, as well as critical thinking. These competencies make up the core of the educational programs on which work-based education is founded. (Gordon, 2014, p. 290)

Based on the topics revealed in this research review, and the conceptual framework that I derived from this review, I was able to prepare my research methodology. The next chapter will describe my research methodology, and the processes and methods that were used to collect and organize my data.

CHAPTER III

METHODOLOGY

Introduction

The purpose of this study is to understand how work-based education experiences inform student attitudes about and success in high school. I also sought answers about how these experiences impacted students' attitudes about post-secondary plans and how these results varied based on the ethnicity and gender of the participants. In the previous chapter I reviewed five main themes or areas of research that established context and support for my research. They included program structure and participation data; CTE and Constructivism; CTE and student impact; Post-high school destinations; and concerns with tracking and vocational education. I also described the conceptual framework that I developed to guide my research.

This chapter reviews the methods I used for my research. First, I conducted oral history interviews with nine expert practitioners in the field of CTE to learn more about the history and practices of work-based learning in the public school system in North Carolina. This information provided a rich sense of historical context in order to help better understand current day students' voices. I then interviewed students participating in work-based experiences and examined the impact of these reported experiences as they related to their attitudes about high school and their post-secondary plans. For this aspect of my research I employed a qualitative general interpretivist approach. The experience

of completing work-based education is not common to many students as they progress through high school. For those students who do have the opportunity or inclination to participate, I wanted to understand the way it informs their thoughts and perceptions about high school, and how it impacts the formation of their plans beyond graduation.

Oral History

Oral history is a form of gathering data in qualitative research. Similar to the personal interviews referenced previously, oral history can be described as an unstructured interview methodology. “Oral history was established in 1948 as a modern technique for historical documentation when Columbia University historian Allan Nevins began recording the memoirs of persons significant in American Life” (Thomson, 1998, p. 581). Typically, oral history methodology is used when there is an absence of well-documented information, or for populations who may have been marginalized or otherwise ignored (Thompson, 1998). In this case, I chose this method because there was neither available documentation of what work-based learning models had been used in North Carolina, nor information regarding how work-based learning developed over time. I also chose oral history as model for the discussions and conversations with the expert practitioners because I wanted an open and unstructured way to learn about the history of work-based education in North Carolina. Being such a broad topic with many different aspects and levels of progression, I did not want to limit the gathering of data based on specific events, people, or policies. “It is not enough to say that you are studying a longer period of time with oral history; in fact, in some cases this may not even be true. What is

really underlying the strength of the method is that you can study process” (Portelli, 2009, p. 153).

I decided to employ this unstructured oral history method in talking with the expert practitioners because I did not want to limit the scope nor range of topics and information they could share with me about the history of work-based education in North Carolina. I was able to hear about specific accounts and recollections that were uncovered by merely following the train of thought of the person I was talking with. Having these open-ended conversations, sometimes on multiple occasions with the same person, proved to be a very effective way to develop a history of work-based learning in North Carolina.

Oral History Participants

As a CTE Director in a public school district with seven years of experience, I have developed a network of professional relationships with others across the state. I used my contacts in this field to help me identify who would be ideal candidates to provide an oral history of this topic. I sought IRB approval for this separate yet related area of research, but was granted an exemption based on the nature of the participants and the methodology employed. Nonetheless I still acquired formal, signed consent from each individual.

After identifying key individuals across the state, I made phone calls and sent emails to recruit participants. After explaining the purpose of the study and providing consent forms, I then conducted eight extended oral history interviews with the expert practitioners shown in Table 2.

Table 2

Expert Practitioner Participants

	Name	Position/Background	Date(s) Oral History Provided
1	Dr. June Atkinson	Former State Superintendent and former CTE Teacher (30+ years of experience)	9/22/15
2	Jo Ann Honeycutt	NCDPI State Director of CTE, former CTE Teacher (20+ years of experience)	9/22/15
3	Ted Summey	Former NCDP Regional CTE Director, former and veteran CTE Teacher (30+ years of experience)	9/22/15 10/10/15
4	Ruth Huff	Executive Director of NCACTE (State professional association) and retired CTE Teacher (30+ years of experience)	9/16/15
5	David Whebie	Wake County Director of CTE, former NCPDI CTE Section Chief, former CTE Teacher (30+ years of experience)	9/16/15
6	Brantley Murphy	President NCACTE (State professional association), Current veteran CTE Teacher (25+ years experience)	9/16/15 10/10/15
7	Dorwin Howard	Former CTE Teacher, CTE Director, current Superintendent Granville County (30+ years of experience)	11/18/15 11/19/15
8	Paul Heidepriem	Retired ICT and CTE Teacher (30+ years of experience)	11/18/15

Each of these oral history interviews was conducted either in person or via telephone, sometimes with multiple follow-up conversations. There was no structured interview protocol, but rather an informal, open-ended series of questions and individualized discussions that followed the path of information given by the interviewee.

During these oral history discussions, I took extensive handwritten notes, but did not audio record any of the conversations. Some of the discussions lasted only thirty minutes, others spanned more than 90 minutes when combining the multiple conversations and follow-up phone calls.

Some of the participants provided me with notes or drawings during the discussion. I kept hard copies of the notes and of the signed consent forms. I then used the information gathered in these conversations to construct a historical portrait of work-based learning in our state. The findings from these interviews are discussed in more detail in Chapter 4, along with the relationship to the student interview data.

Interpretivist Qualitative Research

After conducting my oral history, I relied on interpretivist qualitative research methods to investigate the perceptions of contemporary students participating in work-based experiences. The qualitative tradition of research stems from the tension between the differences in research of natural and social sciences. An empirical approach to ‘knowing’ about external conditions in the natural world has led to incredible advances in the sciences and our understanding of the physical world. Indeed, the scientific method is founded upon this premise of observe, hypothesize, test, and analyze. It is a linear, yet spiraling approach to understanding phenomena in our world. It works well because it relies on the gathering of empirical data, in other words what can be observed using our senses. The data collected is external to the researcher or the person gathering the evidence, and can be substantiated and verified through reproducing the process (Lichtman, 2013).

Using this type of methodology in analyzing social or human interactions and behaviors presents some issues. First, when studying human behavior and interactions, the observations are impacted by both external and internal influences (Hamilton, 2014). If I observe the behavior of an individual or group of people, I create my interpretation of their reality. Experiences, emotions and ideas I possess impact the reality I perceive. Therefore, I need to employ a research model that allows for this. Qualitative research, and the tradition of interpretivism, is an evolutionary product of the need to establish different ways for researching and understanding the ‘soft’ sciences. Early efforts to find an alternative to quantitative research led to positivist models, or a paradigm that was characterized by testing observable facts (Lichtman, 2013). Eventually this gave way to other perspectives, including antipositivism, which has its foundations in the ideas related to naturalistic inquiry (Lincoln & Guba, 1985). The seeking of truth in a personal way is contrasted with the empirical approaches of other previous research methods. Instead, an interpretivist qualitative approach seeks meaning or truth through an inductive and deeply personal process. It, however, does not mean that the researcher directly injects his or her opinions or pre-conceived notions into the process. “What is salient is that first, no manipulation on the part of the inquirer is implied” (Lincoln & Guba, 1985, p. 8). However, the basic premise of interpretivist qualitative research does allow for subjectivity, and in fact expects it to occur, so long as it is acknowledged and made clear. Objectivity is inconsistent with the notion of constructed realities that we all live in. The data that the researcher gathers will in fact be interpreted by that person based on his or her own personal lived experiences and background.

Qualitative research follows an inductive approach to understanding. Instead of moving from the general to the specific, the opposite is true. It uses single specific observations and data gathered to form a greater understanding about the topic and how the parts relate to one another (Lichtman, 2013). This approach will work nicely for my research, as I intend to gather many individual pieces of information from many different students, and then seek patterns and trends. The data collected from the students also may reveal the lack of such patterns.

Interpretivism is strongly connected to the qualitative tradition (Snape & Spencer, 2003). The roots of qualitative research go back as far as the writings of such philosophers as Kant and Dilthey, both of whom wrote about human knowledge being dependent not just on empirical observation, but also the perceptions and lived experiences of the individual. The idea that one's own cultural and personal history could affect one's understanding and view of reality is at the heart of what qualitative research seeks to reveal (Snape & Spencer, 2003).

General interpretivism, within the qualitative tradition, further embraces this methodology, in that it emphasizes the meanings that are constructed by individuals.

Interpretive methods of research adopt the position that our knowledge of reality is a social construction by human actors. In this view, value-free data cannot be obtained, since the enquirer uses his or her preconceptions in order to guide the process of enquiry, and furthermore, the research interacts with the human subjects of the enquiry, changing the perceptions of both parties. (Walsham, 1995, p. 376)

The interpretivist research method also relies heavily on the researcher. The participants are still providing the data, but the researcher designs the mode, lens, and

process by which it is collected, and he or she is then also the one to draw conclusions based on the general information gathered. Typically, in this method, the researcher will use personal interviews or focus groups to gather information. The protocols for these interviews and focus groups can vary in structure and in scope, but ultimately the purpose is to gather information directly from the participants (Lichtman, 2013).

Setting

The setting for the current student interview portion of the study was four public high schools situated on three campuses located in a rural county in central North Carolina. One of the three campuses is divided into two separate schools: a traditional ‘comprehensive’ high school that offers all CTE courses except Health Sciences; and, a “School of Health and Life Sciences,” which offers CTE courses in Health Sciences. The other two campuses are comprehensive high schools offering a broad set of CTE courses in all program areas. All four schools follow a traditional school calendar. Each campus has between 700 and 1,000 students enrolled in Grades 9–12.

For my study, I interviewed 20 high school students (see Table 3). Students I interviewed were either participating in, or had completed, a work-based experience at their school called a “CTE Internship.” Each student chose his or her internship in coordination with the school’s Internship Coordinator, their parents, and a work-site supervisor. In some cases, the students chose the work-site on their own, and in other cases, students identified a field they were interested in, and then asked for assistance in securing a position. This assistance usually took the form of providing feedback on résumés, job interview rehearsal, or other logistics. In every case, students had the final

say in where they complete their internship. Because this is a rural district, sometimes choices of internships were limited by the available employers willing to offer positions to students.

Table 3

Current High School Student Participants

Participant	Name	Internship	School	Ethnicity	Gender
1 ^{1,4}	John	School District—Tech Support	South HS	w	m
2 ¹	Dustin	Grocery Store	South HS	w	m
3 ¹	Jesus	Grocery Store	Central HS	h	m
4 ¹	Vonya	Adv. Mfg. Facility	Central HS	b	f
5 ¹	Kathy	Restaurant—Wait Staff	Central HS	w	f
6 ¹	Susan	Restaurant—Wait Staff	South HS	w	f
7 ¹	Trevor	Agriculture Supply Store	North HS	w	m
8 ¹²	Samantha	Community Wellness Center	South HS	w	f
9 ¹	Jamal	Fast Food Worker	North HS	b	m
10	Jackie	Fast Food Worker	Central HS	b	f
11 ²	Braxston	Shipping Company - Logistics	South HS	w	m
12 ²	Heather	Teacher Asst.—Elem. School	South HS	w	f
13 ^{2,4}	Landon	Auto Parts Store—Sales	South HS	w	m
14	Maria	Fast Food Worker	Central HS	h	f
15 ⁴	Jaden	Trampoline Park	Central HS	b	f
16	Tyler	Fast Food Worker	Central HS	w	f
17 ³	Angela	Community Wellness Center	North HS	w	f
18 ³	Cheyenne	Fast Food Worker	North HS	b	f
19 ³	Miguel	Towing and Recovery Garage	North HS	h	m
20 ^{3,4}	Harmony	Fast Food Worker	North HS	mr	f

Note. w = White; b = Black; h = Hispanic; mr = Multi-racial; f = Female; m = Male

¹ pilot study participants

² focus group A

³ focus group B

⁴ observed in workplace

I began by preparing a list of all students in the district who were either currently or previously enrolled in an internship program while in high school. I sorted the lists by gender (male, female) and then sub-sorted by race and ethnicity (White, Black, Hispanic, other). I numbered the list in alphabetical order by last name, and then used a website called “Research Randomizer” (<https://www.randomizer.org/>) to select twenty students. Of these selected participants, the balance between male and female students and ethnicity of the participants roughly mirrored the diversity of the district’s population at large, which is approximately 48% male and 52% female and 50% White, 33% African-American, 14% Hispanic, and 3% other (see Table 4).

Table 4

Current High School Participant Number and Percentage for Gender and Ethnicity

Subgroup	<i>n</i>	%
Male	8	40%
Female	12	60%
White	11	55%
Black	5	25%
Hispanic	3	15%
Multi-racial	1	5%

Research Design

I used a semi-structured interview protocol with each of the participants in the individual interview (Appendix A). The questions were designed to elicit responses that are pertinent and aligned to the research questions. The durations of the interviews varied depending on the responsiveness and the extent of elaboration provided by the

student. Some students gave limited responses and did not provide much detail about their experiences. In a few of these instances, the interviews lasted little more than fifteen minutes. In other cases, the students were very engaged and talkative. They elaborated on their initial responses and expanded on their ideas and emotions about their internships, resulting in an actual conversation and meaningful exchange about their experience. Some of these interviews lasted well beyond thirty minutes.

Following the individual interviews of these twenty students, I then conducted two follow-up focus groups meetings. One focus group had four students, and one had five students. I chose these nine students based on how engaged and responsive they were in the original individual interview sessions. Each of these focus group meetings lasted about one hour. I included students who spent more time answering and expanding on the questions in the individual interviews to be part of the focus groups. I wanted a focus group with participants who would engage with one another and share their thoughts more freely. I also was mindful to select students who had differing opinions and ideas about the internship experience, and who had internships in different settings. The purpose of putting these students together after the individual interviews was twofold: first, I could follow up with any insights or remaining questions that were revealed in the individual sessions; and second, I provided the students with an opportunity to feed off one another in a group discussion that was more relaxed and peer-centered. It was certainly my intention that the “group interaction may trigger thoughts and ideas among participants that do not emerge during the individual interview” (Lichtman, 2012, p. 207).

After a period following the focus group meetings, I then selected four student participants from the individual and group sessions. I was able to select two males and two females. I also selected one African American student and one Hispanic student. I then spent an additional one to two hours observing each of these four at their internship site to gain a deeper and more complete understanding of their experiences with work-based education. I scheduled a time to observe them in their workplace, shadowed them, and took detailed notes on their behavior and comments.

All of the participants in the study were 18 years old at the time of their interviews and did not need parental consent. They received information about the purpose of the study and were required to sign the appropriate adult consent form as approved by the IRB. Each individual interview and focus group was audio recorded, and then transcribed using a private transcription service recommended by colleagues. No audio recordings were made during the work site visits or observations. I took notes during and after these observations as a method to record data during this portion of the study.

For security purposes, I assigned a number to each student, and replaced their given names contained in the files of the audio recordings and transcriptions with a pseudonym. I use these pseudonyms when referring to participants during this study. I have maintained a separate file that indicates the identity of the participants. All of these files are securely stored in the UNCG Box cloud storage, for which only I have access.

It is important to note that not all of the participants were interviewed during the same time period. Of the twenty students who were interviewed individually, nine

students were interviewed during a previous pilot study that was conducted in the spring of 2015 for Dr. Kimberly Hewitt's course, ELD 767: Qualitative Data Collection and Analysis. The other 11 students were interviewed in summer and fall 2016. All participants were part of the same district.

I began this pilot study by pursuing an area of professional interest under the guidance of Dr. Hewitt. She coached me in crafting the purpose, research questions and methodology for the project, and also successfully guided me through the IRB approval process for the pilot study. All of the participants were interviewed using the same protocol, however the participants who were not part of the pilot study were asked additional questions of how gender and race factor into their experiences. Additionally, no participants from the pilot study participated in the focus groups or were observed at their place of work. This pilot study was conducted to determine the feasibility of a larger research study. Its successful completion led me to proceed with this large, more in-depth research model and it allowed me to strengthen and validate an effective methodology.

Data Collection Process

For the individual interviews, each student was interviewed in person while being audio recorded. The interview questions were designed to elicit responses that reveal the students' attitudes and feelings about high school, and evoke responses that specifically address my research questions. My initial contact with the students I interviewed was delicate; I didn't want students to feel uneasy or have the impression they are somehow, "in trouble" because of having to come to the office to speak with an adult. When

possible, I conducted the interviews during times that did not interfere with the students' regular class time. At the high schools where the participants attended school, the bell schedule operates on four, 90-minute class periods, or a block schedule. All of the participants I interviewed were seniors and many of them did not have a full schedule of classes on campus. Many did not have classes scheduled during 3rd or 4th periods. In these instances, the students usually left school early either to work, attend classes at the local community college, or simply go home. I conducted the interviews for the majority of the students during the time period after their last class for the day. In other cases, I conducted the interviews either during the weekly homeroom period, or immediately after school. This interview schedule minimized the amount of class time missed. It also gave me sufficient time to reassure them of my intentions and set them at ease; ultimately, I wanted them to become comfortable and relaxed once the interviews began. Each interview lasted between 15 and 40 minutes.

The two focus groups occurred at two of the three school campuses and each lasted approximately 60 minutes. These group interviews were also audio recorded. As with the individual interviews, I chose a time to conduct the focus group that minimized the impact on instruction for the students. I also used a focus group outline (Appendix B) to help guide the process of discussion in that small group setting.

Following the individual and focus group interviews, I then selected the four students with whom I continued my in-depth conversations and work site observations. Each of these lasted between two and three hours. I narrowed down the candidates for on-site visits based first on their demographics: two male, two female, and at least one

African American and one Latino student. I was unable to secure a site visit with the Latino student, so I instead chose a student who is Multi-racial. I then chose students who had a variety of job types, and who also displayed interesting and engaging dialogue during the interviews. I also tried to choose students who reported a variety in the quality of their experiences, so I could get differing perspectives on the internship experience. Once I selected the observed participants, I then created personalized schedules with each one so I could spend time with them at their workplace. I began by reaching out to their site supervisor, making sure I had proper authorization to visit the workplace, and explained the purpose of my visits. In most cases, these visits occurred in the late afternoons and early evenings. In one instance, it occurred during the weekend. At the beginning of each visit, I introduced myself to the supervisor and other staff, and set up in a position where I could still observe the participant but be as unobtrusive as possible. I took many notes while on site, and carefully recorded the behaviors and comments made by the participants. Following each of the four visits, I also added notes and reflections.

Analysis

All student interviews and focus groups audio recordings were transcribed verbatim by a third party and imported into *Dedoose*, a brand of online qualitative data analysis software. Once imported into *Dedoose*, the data was coded using both a prior and open coding methods. Eight root codes and nineteen ‘child’ codes were identified from the data. The ‘child’ codes were sub-components of the root codes, which drilled down to the issues with more specificity. In many cases, particular excerpts were coded multiple times, and sometimes shared the same parent code. See Figure 2.

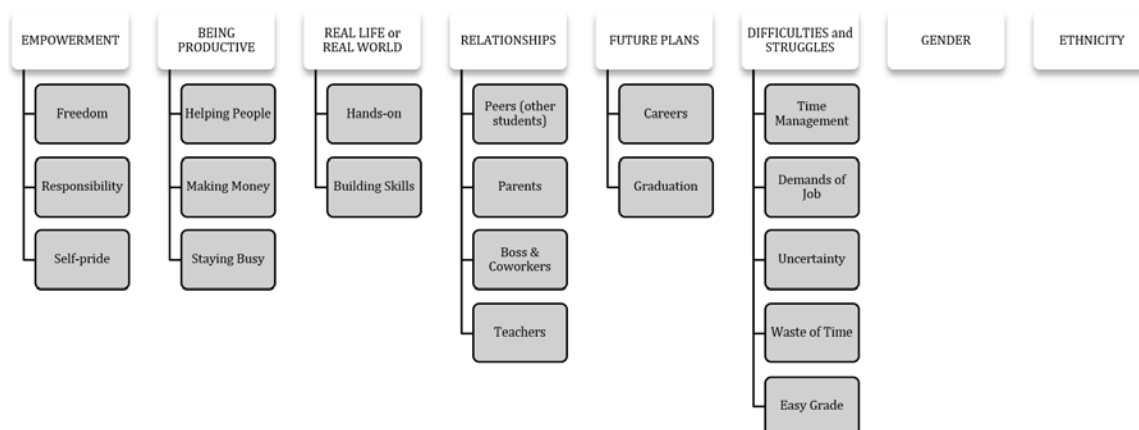


Figure 2. A Priori and Open Codes: Parent and Child Codes.

Positionality and Subjectivity

As previously acknowledged, I have a positive bias for this topic. As the Director of High Schools and CTE for my school district, I believe there is value in Career and Technical Education. I see it as a critical piece of the high school education experience. I believe in the program and am convinced that it makes a positive difference in the lives of many students. Many of the courses bring relevancy and opportunities for application to real-world projects.

I also realize that conducting research in the school district in which I work could have presented some challenges. I frequently visit the high schools in our district. I personally know many of the teachers, and many students recognize me and know who I am. It was likely that even if the student participants I selected did not personally know me, they knew of me, or who I am. However, even though they may have associated me as someone “important” in our school system who usually wears a coat and tie, few of them had any previous experience with me as a person who someone who has direct

influence or control over their daily interactions at school. During my interactions with the students, it seemed that my position of power was at best an abstract notion to the student, and not one based in their personal experiences.

Nonetheless, I took precautions in my interactions with the student participants and the staff at the schools while I conducted the interviews. Immediately after greeting each student, I attempted to engage in some idle banter or 'chit-chat' with the student to help break the ice and establish rapport. I smiled often, and tried to use humor and small talk to set the student at ease. I also tried to make some personal connections and ask about their teachers or interests in school. This helped in setting a positive tone with the interviewee. I used my formal title when introducing myself, but I explained that the purpose of the interviews was to gather information that might help make the internship process better for other students. I conducted the interviews in neutral locations at the school (usually the conference room in the guidance offices) that I hoped would minimize my influence on the participants. When speaking with students, I was very conscious of how I presented myself physically, and I removed my tie and jacket prior to the interviews. I also used open and non-threatening body language, and I changed my speech patterns to be more relaxed and casual. I also tried to conduct the interviews in a way that will allow me to get spontaneous, rich, specific, and relevant answers from the interviewee (Kvale & Brinkman, 2009). I did not merely read the interview questions verbatim and then listen for answers, but rather I paraphrased, and interjected complementary and encouraging phrases as the conversations progressed.

I was also mindful of my position on other levels. The high school principals, teachers and support staff all know who I am and the position I hold. To be clear, I have no supervisory authority over any personnel at any school. However, I do wield considerable influence in a variety of ways. I control substantial budgets that impact our high schools. I also make curricular and programmatic decisions that impact how high schools operate. I also have a very close working relationship with the executive leadership staff and school board members. Furthermore, I acknowledge that I am directly responsible for the CTE program in our school district. Any evaluation of components or aspects of the program could reveal weaknesses or areas of improvement that should be addressed. In this way, it is inherently risky for me to gather information, which in effect, could reflect upon my own job performance or the performance of other employees in the district.

Conversely, I also have a vested interest to seek out any shortcomings in order to strengthen and improve upon them and make our program the best it can be. The results from this research can provide valuable information that may help the students in our school district. The findings may help improve or expand work-based learning opportunities for our students. Also, the information may help inform leadership practices and programmatic decisions regarding the CTE program at large as well as CTE programs outside of our district. I place a very high value on my relationships with the principals of our high schools, and I consider one of my primary roles to support them and improve their leadership performance, and any insight learned in this research will be used to support their work.

I wholeheartedly embrace my professional connections to this study, and am convinced that it will strengthen the quality of attention and care I conduct in the gathering and analysis of the data, and ultimately benefit the students to whom I serve.

Trustworthiness

Throughout my entire research study, I strived to maintain a high-quality process for collecting, analyzing, and presenting my data. It was critical that I carefully identified and interacted with the study participants; I wanted to ensure that their ideas, opinions and experiences are protected, valued and properly analyzed. All of the data collected is personal and privileged, and has been treated with the utmost caution and respect. It was and still is essential that the participants felt comfortable enough to provide me with rich accounts of their experiences so my analysis would be based on truly accurate accounts.

I was also cognizant of not dismissing any divergent data points that might be revealed through this process, especially as they might run counter to my own beliefs or preconceived notions of the value in CTE programs. Furthermore, I undertook a member checking process. After each interview and focus group meeting, I returned to the school and provided each student with a copy of the interview transcript. I explained to them that I wanted them to have a copy so they could read it, and then I allowed them an opportunity to respond to me with any changes or edits they wanted to make.

Benefits to this Approach

Through my research questions, I sought to understand the lived experiences of the individuals I interviewed. Their opinions, ideas, and interpretations of their experiences are uniquely their own. Their privileged thoughts and ways they make

meaning of the world around them are the rich evidences I want to uncover. For this study, I was concerned with examining experiences from the perspective of the individual, ‘bracketing’ taken-for-granted assumptions and usual ways of perceiving (Lester, 2009). In this way, I specifically targeted how participation in CTE work-based experiences informed student’s prospects for graduation and their attitudes and plans beyond high school.

Using this methodology is the most direct way to access the data. Since I wanted to understand how WBE impacted secondary students’ thoughts about high school and plans thereafter, then I needed to ask them and observe them in action. While each student’s responses varied, and each person had his or her own unique perspective, the experience I asked them about is common to all of them.

Results from this study may benefit students who participate in work-based experiences while in high school. The findings may reveal information that could assist in the design, promotion and implementation of work-based education in secondary schools, and therefore benefit the students in those programs. It could also assist in the modification of policy or administrative procedures at the district level to improve opportunities for students. It also may help to strengthen any specific processes or policies in the programs in our school district. The data may reveal shortcomings that can be corrected or provide new ideas about ways for future students to participate.

In conducting my research in this manner, I was able to employ an inductive approach to move from the specific, to the general, which is entirely consistent with a general, interpretivist qualitative approach. Additionally, prior to this work, I conducted

an IRB approved pilot study with nine students that followed a very similar methodology. Additional details and information about this pilot study are included in a subsequent section.

Limitations

As the Director of High Schools and CTE for my school district, I have a positive opinion about Career and Technical Education. I see it as a critical piece of the high school education experience. I believe in the program and am convinced that it makes a difference in the lives of many students. I am also convinced that many of the courses bring relevancy and opportunities for application to real-world projects. Because of this, and as the sole researcher on the project, I absolutely needed to be mindful of the influence and perspective I possess when I gathered and analyzed the data.

That being said, I do know that CTE coursework and/or work-based experience is not a solution for every student; nor is it a guarantee to motivate students who may otherwise have given up on their education. I also understand that the relationships between participating in work-based experiences and having ‘future aspirations’ beyond high school could be correlated and not causal. Making conclusions or drawing inferences in this regard will be difficult. There are other limitations to this study. First, it was isolated to a single geographic region in North Carolina. If the data do suggest trends or patterns, it is unlikely that larger extrapolations or implications can be transferred to all secondary students. Quite simply, it is a small, localized study. The number and diversity of the participants will help to offset this somewhat, but again, there is a limit as to what one will be able to inductively conclude from the data.

Risks

The study carried limited risk. In the event there was or is a breach of confidentiality of the participants, the consequences will be that the student's answers to interview questions about work-based experiences will be exposed.

Participant names are not directly connected nor attached to the names of any of the electronic files, recordings, or other data. A pseudonym was used to protect their identity, and the name of the school and other identifying features was also altered to provide anonymity in all documentation. A master list linking student names to the pseudonym is kept on a password-protected file. All electronic files are kept in a password-protected cloud storage account (UNCG Box account) that can only be accessed by me. All information obtained in this study is strictly confidential unless disclosure is required by law.

Conclusion

The research questions and the conceptual framework for this study inform one another. In turn, these compelled me to gather information and develop a context of the history of work-based education in North Carolina and helped me craft the interview questions and focus group questions for the contemporary student participants. Using firsthand accounts of student experiences and setting those against the backdrop of how public education has approached these types of programs in the past provides a rich contemporary narrative with a strong sense of historical context. My study establishes an understanding of where we have been in the past, and individual snapshots of where we are now with specific students in one school district. This methodology allows for both a

narrow and specific glimpse into the perspectives of the young people in our schools, and it also provides a broader background with which to understand the role of work-based education in our state's public education system. In the Chapter Four that follows I will discuss the specific findings as related to the history of work-based education, which was gathered in the oral history research of expert practitioners. Subsequently in Chapter V, I present the findings from my interpretive qualitative research that included interviews, focus groups and observations of students currently participating in work-based education.

CHAPTER IV

CAREER AND TECHNICAL EDUCATION IN NORTH CAROLINA: A BRIEF HISTORY

Introduction

This chapter provides detailed findings regarding the oral history of work-based education in North Carolina. The findings of the oral history research begin with an overview of the various program designs of work-based learning, and then establish a historical timeline of the evolution of these programs in the state. The timeline is sectioned into three main categories: emerging; expanding; and, specializing. Throughout each of these sections, individual expert practitioners provide perspectives and analysis of work-based education during this time period. Finally, I describe what the oral history participants believe the future of work-based education may entail, and how this future relates to the current program models. Note that I provide a list of the oral history participants and a description of their backgrounds in Chapter III.

Providing context and defining the types of work-based learning experiences in the past helps us understand the historical progression of such educational experiences. During my oral history interviews, I was able to engage in meaningful conversations with expert practitioners in the field of CTE and work-based education. While the main purpose was to gather information about the history of these programs in our state, the interviews also yielded interesting perspectives and opinions about this topic. This

provided a rich tapestry to serve as a backdrop for the firsthand accounts I received from the students and present in Chapter V.

Work-Based Learning in North Carolina

Timeline

In speaking with the expert practitioners, it became apparent that a description of the historical sequence of major events was helpful in understanding the evolution and variation in CTE over time. Many of the expert practitioners referred to specific eras or periods of time when referencing CTE and work-based education. In order to more easily clarify these references, I researched additional information that I then was able to corroborate with their accounts. As the result of this work, I developed a visual representation of the temporal progression of work-based education that is divided into three main eras (see Table 5). These segments of time also reflect different trends in public education in general, and the role of vocational (or CTE) education parallels this development.

Emerging (Pre-WWII): Formal public education programs and standardized curriculum were just beginning to be developed and established. Consistency of implementation and availability of resources varied considerably. Legislation and policy is new.

Expanding (Post-WWII): Public education infrastructure becomes universal. Programs and curricula become more uniform. Funding becomes available. Legislation and policy established and enforced. The advent of technology begins to dramatically affect the workforce, and the way in which workers are trained.

Table 5

Historical Timeline of Work-based Learning

HISTORICAL TIMELINE				
Oral History Accounts in North Carolina		Established National Milestones for CTE & WBL ¹		Established National Milestones in Public Education ²
E M E R G I N G				
Some early accounts of activities where students were making connections with agricultural activities—mostly informal	1900	1917: Smith-Hughes Act passes, providing federal funding for agricultural and vocational education. Effort to remove power of apprenticeships from unions.	1900	1916: John Dewey publishes “Democracy and Education”—poses important questions about traditional vs. progressive education—and the rationale for public education
Accounts of FFA Supervised Agricultural Activity (SAE)—required work assignments in specific projects/tasks	1925	1918: Smith Sears Act 1926: FFA (Future Farmers of America) founded in Virginia. First programs	1925	1944: G.I. Bill of Rights gives thousands of working class men college scholarships for the first time in U.S. history.
Examples of “community canning” events held at schools		1929: George Reed Act 1936: George Dean Act		

Table 5

Cont.

HISTORICAL TIMELINE				
Oral History Accounts in North Carolina		Established National Milestones for CTE & WBL ¹		Established National Milestones in Public Education ²
EXPANDING				
Additional accounts of FFA Supervised Agricultural Activity (SAE)—required work assignments in specific projects/tasks	1950	1950: The U.S. Congress passes Public Law 81-740, which grants the FFA a Federal Charter and stipulates that a U.S. Department of Education staff member be the national FFA advisor.	1950	1954: Brown v. Board of Education of Topeka. The Supreme Court unanimously agrees that segregated schools are “inherently unequal” and must be abolished.
	1960s: Business and clerical internships—first work-based opportunities for women in ‘professional’ workplaces	1963: Vocational Education Act (and subsequent amendments)		1958: National Defense Education Act passed as a direct response to the launching of Sputnik by the Russians. It emphasized math and science. 1964: Civil Rights Act banned discrimination on the basis of race in all federally funded programs. Head Start was launched as a part of the War on Poverty.

Table 5

Cont.

HISTORICAL TIMELINE		
Oral History Accounts in North Carolina	Established National Milestones for CTE & WBL ¹	Established National Milestones in Public Education ²
EXPANDING (Cont.)		
<p>1960s: First clinical experiences in health care environments</p> <p>1960s: Industrial co-ops introduced—work-based learning in factories and processing areas</p>		<p>1965: Elementary and Secondary Education Act gave the federal government the right to withhold funding for noncompliance. Congress has renewed this act every few years.</p> <p>1970: Jean Piaget's book, <i>The Science of Education</i>, is published. Helps to popularize discovery-based teaching approaches, particularly in the sciences.</p>

Table 5

Cont.

HISTORICAL TIMELINE				
Oral History Accounts in North Carolina		Established National Milestones for CTE & WBL ¹		Established National Milestones in Public Education ²
SPECIALIZING				
1970s: ICTs (Industrial Cooperative Training) introduces structured for-credit opportunities	1975	1984: Carl D. Perkins Act	1975	1972: Title IX passed, prohibiting public schools from discriminating on the basis of gender. This paves the way for the expansion of school athletics programs for girls.
1970s: COO—Cooperative Office Occupations becomes formalized		1990: Carl D. Perkins Vocational Education Act		
1990s: CDTs (Career Development Coordinators) become new model for managing WBL		1998: Perkins “Three”		1994: Elementary and Secondary Education Act renewal under Clinton requires states to come up with content standards, assessments, and definition of adequate programs to measure children’s progress.
1995: Apprenticeship 2000 introduced in Charlotte, NC—first formal regional apprenticeship program in NC				

Table 5

Cont.

HISTORICAL TIMELINE				
Oral History Accounts in North Carolina		Established National Milestones for CTE & WBL¹		Established National Milestones in Public Education²
SPECIALIZING (Cont.)				
2013: NCTAP—North Carolina Triangle Apprenticeship Program—second formal apprenticeship in NC	2000	2006: Perkins “Four”	2000	2001: No Child Left Behind passed.

¹ Source: Gordon (2014)² Source: American Educational History Timeline <http://www.eds-resources.com/educationhistorytimeline.html>

Specializing (Modern era): As the national economy becomes fully diversified, the role of CTE becomes highly differentiated and specialized. Advanced skill sets are targeted as technology continues to leap forward.

The Emerging Period

While none of the individuals interviewed had any direct professional knowledge of vocational education or work-based learning prior to the late 1960s and mid-1970s, they did provide anecdotal clues as to what the early years looked like in North Carolina. Additional research helped fill gaps and verify the claims and accounts of the interviewees for accuracy. Prior to the 1930s, formal vocational education in NC was non-existent, or isolated at best. Beginning in the late 1930s and continuing through the 1940s and 1950s, vocational education grew and evolved into three basic areas of focus: Agricultural Education, Home Economics, and Trade and Industrial Education. Agriculture Education was by far the most popular and widespread program, and was delivered entirely to young males. At this time in our state's history, agriculture was the driving force behind the economy, and "in 1940 over 40% of the population in North Carolina still lived on farms" (Lilly, 2007).

Since its inception, Agriculture Education has been inextricably linked to FFA, or Future Farmers of America. This student organization provided (and still provides) opportunities for hands-on practice, competitions and supervised work-based learning experiences. In these activities, students judged livestock, competed for crop yields, or practiced machinery repairs. It was not uncommon for many students to spend parts of

school days on farms in an SAE (Supervised Agricultural Experience), practicing and honing specific skills introduced to them in classes.

At the same time, Home Economics was emerging as the program for females, and helped formalize instruction for skills that would allow them to maintain the home and support the family. Cooking, sewing, basic finance, and child rearing were included in the loosely defined curriculum. These students also had avenues to apply skills learned, although not quite the same way as their male counterparts. David Whebie, CTE Director of Wake County Schools and former State NCDPI CTE Section Chief and CTE Teacher, recalled times from earlier generations (pre-WWII) when the Agriculture students would bring in produce grown on local farms, and the home economics students would have canning days at the schools. Whebie explained,

The boys would bring in the butter beans, corn, and the girls would make production lines to can them. It was a community event, and the students would do this during the school days, learning the skills they needed to survive at the time. That's just the way it was.

Around this same time, Trade and Industrial education began to emerge in North Carolina. In a largely rural state, this area was slower to grow, and focused mostly on basic carpentry and metals manufacturing skills. Some of students in these areas were able to practice their skills in formal ways, but none of the participants were able to cite specific examples.

The Post-War Expansion Period

Following WWII, the state's dependency on agriculture began to shift, and the number of family farms fell, with larger more commercial farms taking hold. Despite

this, Agricultural Education remained strong, and FFA chapters grew in numbers and size across the state. Home Economics continued to flourish, and the Trade and Industrial Education programs began to firmly take hold. Each of these areas continued to grow and expand co-curricular clubs and opportunities for work-based learning experiences. In the late 1950s, the Supervised Agricultural Activity associated with FFA was subsidized through various grant opportunities. Brantley Murphy, an Agriculture Teacher at JF Webb High School in Oxford, North Carolina, recalled hearing,

Back during this time, [late 1950s and early 1960's] there were opportunities for high school students to work on agricultural projects over the summer and during extended periods in the spring and fall while school was still in session. I remember older farmers sitting around, you know, talking about the different projects they did, like on irrigation, forestry, crop production—stuff like that—almost like work camps that they would attend [as students], and these grants would pay them while they completed certain tasks and earned different credentials.

Others also recounted what they referred to as “live projects” where members of the community would come together with secondary students to complete tasks related to essential activities of the local economy.

The era following World War II also saw a huge expansion in the amount of resources devoted to vocation education, and work-based learning opportunities for secondary students (Gordon, 2014). The Trade and Industry program area saw particular expansion, as the manufacturing sectors of the US economy were booming on the heels of the war efforts. This in turn gave rise to the paraprofessional careers (particularly among females) and the creation of Business and Finance program areas. The office environment and associated technologies and skill sets established a need for a multitude

of clerical duties. JoAnne Honeycutt, State Director for CTE, noted this shift in the educational activities during this time.

In the earlier part of the century, Agricultural Education and ‘Home Ec.’ [Home Economics—the predecessor to Family and Consumer Sciences] were the foundation. As the world changed, they evolved, and more programs expanded. They didn’t just need training for women on how to be the homemaker wife and mother, they now had a need for women in the workplace for clerical staffing.

Dr. June Atkinson, former CTE Teacher and State Superintendent offered personal accounts of her experiences in this regard, saying,

There was federal legislation in the 1960s that gave some emphasis on distributive education. Basically, this was a forerunner of Marketing Education and an opportunity for students to learn in the workplace. Around this same time, NCDPI developed “Coo and Do” which stood for Cooperative Office Occupations. This was during the early 1970s and 1980s. This was the pinnacle of work-based education for Business Education at this time. Nearly every urban area of North Carolina added a ‘Coo’ program. There was extensive professional development for the educators who took this role, I was one of them, and teachers had an extended contract and were paid a bit more. Basically, their job was to teach three periods a day, and then go out and spend the rest doing outreach with local businesses. Students worked 15 – 20 hours a week for a year and received an extra credit. I can remember walking the streets of the business district in Charlotte in my heels, visiting each of these companies and checking on my students, making sure they were doing well and also recruiting positions for new students. We really worked hand in glove with the companies to train our students in their environment.

Executive Director of NCACTE, Ruth Huff, also recalled the early days of work-based education, only this was in the area of health occupations in the 1970s.

I remember a time when we were running full-blown internships and clinical rotations. These were 90-hour work-based learning projects where the students had to spend time in the hospital, getting involved in the day-to-day operations. Many of the students I had back then are professional health workers now—

nurses, doctors, staff—you name it. Local people can open doors that people from outside the community can't—especially in rural areas. We seem to be doing less of that now, and it is a shame.

Ms. Huff also mentioned how some program areas lent themselves better to bringing the work into the school, noting carpentry classes in woodshops, and kitchens where students could cook. “There is a different model that works in a limited way for some areas. You don't always have to take the students into the field, but it helps.”

Dr. Atkinson reflected on a student who was involved in a clinical work-based experience at a local medical clinic.

There was this senior, from a wealthy family who was kind of apathetic about school. Well, I found her a job in a medical clinic. At the end of the semester, her father had asked her to drop the clinical work because he thought it was somehow beneath her or not what she ‘should be studying’. So, the guidance counselor took her out of the class, and the student began to have a lot of absences, and then began doing very poorly in school. I reached out to the father, and encouraged him to allow her to continue the clinicals, and he agreed. After she got back into the program with me, everything changed, and she became so excited and eventually went on to pursue a career in medicine. It was an example of how work is a great experience, but connecting school to work is a life-changing experience.

Specializing in The Modern Era

The transition to the modern era of work-based learning and CTE is marked primarily by the advent of technology and increased specialization. As computers and electronics began to revolutionize the workplace, CTE followed suit. Clerical duties across all sectors were transformed. Adding machines and typewriters were slowly replaced with computers, the slide rule gave way to drafting software, and the health sector began to modernize as well. CTE blossomed into the eight different program

areas, and work-based learning activities began to expand. CTE Teacher and NCACTE President Brantley Murphy explained,

In the early 1970s, you started to see a shift in how we served our students. ICTs [Industrial Cooperative Training] teachers were started, and these folks would focus about half their time with students in the field. For the first time there was also a focus on ‘soft skills.’ This was the stuff outside of turning wrenches and wiring up a panel. You know, the stuff that employers were looking for but you didn’t always find in the textbook.

So called “ICTs” were CTE or Vocational Teachers who bridged the role between industry and the classroom. Basically, they spent half of their time outside of the school building, supervising students and working with business and industry to establish work-based learning experiences. They primarily worked with students in the Trade and Industry and Technology Education programs. David Whebie, CTE Director for Wake County explained, “Basically, Ag had SAE, Health Science had clinicals, Business had co-ops, and now T&I and Tech had ICTs. Everyone was in the game, and lots of students were moving through these programs. It was really effective.” Alongside the work-based learning programs for Agriculture Education (SAE), Health Sciences (clinicals) and Business and Marketing (Co-ops), the ICT model remained strong throughout the 1980s and early 1990s, with nearly every district across the state having staff in this position.

Then, things changed. The recession of the 1990s hit industry hard. Work-based learning opportunities began to dry up. “When these business and industries took that big hit, there were fewer opportunities for students. Plus, you had the beginning of ‘outsourcing’—we lost a lot of jobs overseas in the 1990s,” explained Ted Summey. At

the same time, public education also faced significant budget cuts. Programs lost funding, and Career and Technical Education shouldered some of this burden. But perhaps the most significant shift was due to a shift in perception on our public education system. JoAnne Honeycutt, State CTE Director put it this way, saying,

In the 1980s, there was a report called ‘A Nation at Risk’. Basically, it planted the seeds for a movement that really gained steam into the early 1990s. It made our high school graduation requirements start to look more like admissions requirements for colleges and universities. It also fostered an anti-Voc-Ed sentiment, and encouraged this feeling that all kids should go to college. It de-emphasized true opportunities for work-based education.

Brantley Murphy, CTE Teacher and NCACTE President echoed this account of a shift in the perception of public education during this time, saying,

In the 1990s you really started to see this push of our society to get everyone to college—if you aren’t on a 4-year degree route, then you won’t make it. People were saying, you don’t need training, you need the degree. This really hurt the on-the-job education for skilled training. This was crazy, because we still needed welders, and electricians, and health care workers. Some of this you still hear today. Where are we really pushing our kids? What message are we sending? We should not be stigmatizing these legitimate paths to successful careers.

Pressures from within the schools themselves also changed the educational model around this same time. With less funding for public education, there were fewer resources. Eventually, this translated into fewer teaching positions, which in turn meant more pressure on class sizes and the courses being offered at high schools.

Dorwin Howard, former CTE teacher, CTE Director and public school district Superintendent remembered,

During this time, there was a lot of pressure to fill up every single class with students. The master schedules were getting tougher and tougher to make. Any teacher that had ‘extra’ classes where they weren’t in the school building took a hit. Unfortunately, those ICTs and co-op classes and clinicals started to get cut bit by bit. There were just too many students, and the principals wanted the teachers in the buildings so they could spread the students out and reduce class size. It was unfortunate, because they were just looking at straight numbers, and that didn’t tell the whole story.

David Whebie added, “A classroom teacher doesn’t have time in their schedule to build relationships with employers. It’s hard to get those connections when you can’t get into the field.” Others described how separate factors converged to make the mid-1990s and early 2000s a turning point for work-based learning. The ESEA and NCLB added pressure to school administrators and teachers to focus on high stakes testing, and the more complex or confusing metrics associated with work-based learning seemed to be yet another reason to pull back from these efforts. CTE Teacher Brantley Murphy explained:

You can give a 100-question multiple test one day and get a score. But how do you tell whether or not an internship worked for a student? Sometimes it takes months or years before you can tell if that worked. It isn’t always clear cut that way, and so it [work-based learning] took the hit.

The Future

So how can work-based learning be redesigned and rejuvenated for our future generations? According to the participants, there are signs that work-based learning may be poised for a comeback. David Whebie said,

A lot of kids don’t get part-time jobs anymore like they used to. I think many are realizing that the practical skills you learn by having a job, even a crappy job, are really important. It was almost a rite of passage for my generation, and students today seem to be missing those skills that you learn in the workplace. Simple

things like showing up on time, shaking someone's hand, looking someone in the eye. Having respect for hard work. You learn those things by working. The relevance, relationships and all that can happen in the workplace, with supervisors and mentors having a strong impact on the students. We see that we need more of that today.

Dr. June Atkinson, the former State Superintendent of Public Instruction in our state, also saw the tide shifting, and was encouraged by new potential models for work-based learning.

You know, many people would be surprised to know that the training ground for developing teamwork is really the fast food industry. If you think about those jobs, which are mostly held by younger people, it's all about teamwork. We need to think about moving work-based learning to a model where we can rotate groups of students into work-based learning programs. Instead of one student at a time, we need to consider a model where cohorts of 10 or so can push into the workplace. It could be a few days a week, for a period of time, with assignments and advanced planning—almost like the residency model for doctors. We also have to find a way to get the core teachers to get involved, and get these efforts matched up with their curriculum.

Two relatively new programs have added to the choices of work-based learning in NC. Apprenticeship 2000 (Apprenticeship2000, 2016) was founded in 1995 and offered the first formal apprenticeship program in NC, specifically the Charlotte metropolitan area. Targeting high school students, the program partners with local business and industry and community colleges to give students a pathway to earn degrees and secure employment through on-the-job training. NCTAP (<http://www.nctap.org/>) also came online in 2013 and offers similar opportunities for high school students in the triangle area. Both of these programs currently focus on advanced manufacturing and technology-related fields, but have plans to expand to other program areas.

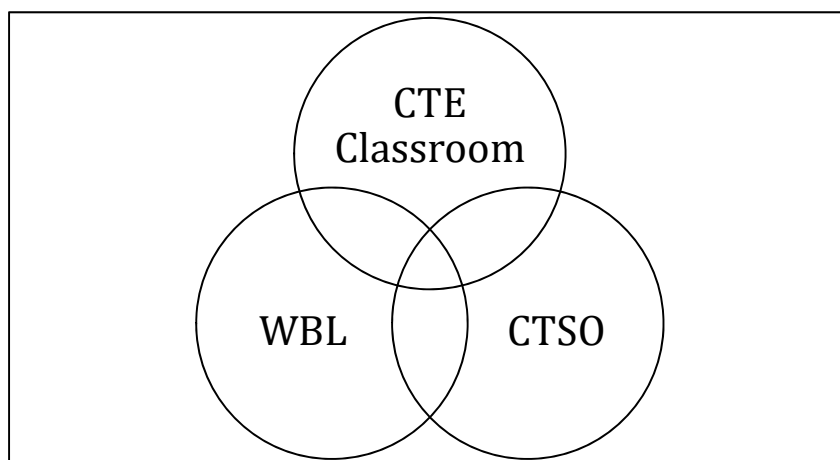
In addition to these two areas, many public school districts are developing individual programs with specific local employers through the CTE Internship course. Students participating in this state-offered standard course must complete a minimum of 135 hours of work-based activities and submit a portfolio to their faculty advisor. Satisfactory completion of the hour requirement, and positive reports from the work supervisor and faculty advisor at school can also result in an honors elective credit in CTE. In one mid-sized rural district, more than 200 students earn a credit in this program each year. Students work in a variety of settings, including small businesses, local farms, fast food establishments, medical facilities, veterinarians' offices, and even large corporations. There are no restrictions for the type of business or industry where the internship can occur.

Visual Models of Effective CTE Programs

Ted Summey, a retired CTE Teacher, District Director and state-level administrator, paused during one of our conversations to sketch out a few diagrams. Using his pen and scrap paper, he roughly drew two diagrams to help conceptualize the definition of work-based education. I used the information in his drawings to create the diagrams in Figures 3 and 4.

Figure 3 represents the relationship of educational activities that take place in an effective Career and Technical Education program. The three overlapping and interdependent parts are classroom instruction, Career & Technical Student Organizations (CTSOs), and Work Based Learning activities (WBL). It is important to note that

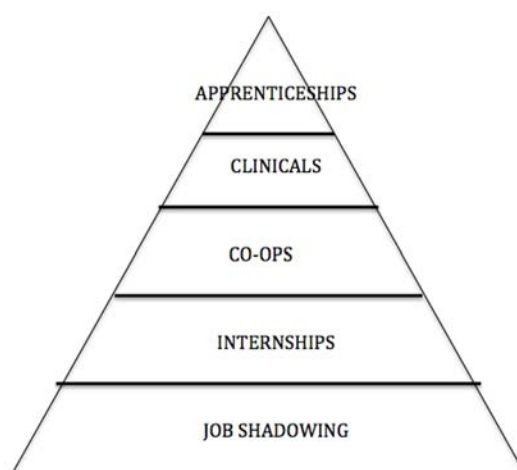
according to the participants providing this oral history, this balance of activities has remained relatively constant since the beginning of workforce education in our state.



Courtesy of Ted Summey

Figure 3. Relationship of Work-based Education to CTE.

Ted Summey also sketched a hierarchical pyramid to better articulate the different types of work-based learning. Again, Figure 4 has been adapted from his original sketch.



Courtesy of Ted Summey

Figure 4. Types of Work-based Education.

Each of the named layers above represent the established work-based learning experiences available to secondary students today. As you move from bottom to top on the diagram, the programs become more formal, are longer in duration, and are more closely aligned with the business and industry partner. Again, while some of the labels of activities have changed over generations, the nature of them has not.

Trends in Work-based Education

In some ways, CTE has come full circle in its attention to WBE. The focus on work-based learning projects in Agriculture and Home Economics during the early and middle part of the 20th century is once again seen as effective instructional models in the modern program areas of CTE (Winborne, 2015). At the same time, CTE has evolved into a much more inclusive, rigorous and comprehensive curricular program (Gordon, 2014).

The future of work-based learning is uncertain. While there seems to be a pendulum swing back toward a secondary education system that values and promotes these experiences, the necessary formal policy and funding structures are not yet in place. The leaders and experts in our state with whom I spoke paint a portrait of an educational system in desperate need of more relevant, authentic experiences for high school students. If we continue to promote post-secondary education without providing students opportunities to experience different possibilities in the workforce, then we will continue to cultivate two groups of students. First, we will see a growing population of students who will enroll in 4-year colleges and who may or may not graduate with relevant degrees, and who will end up with significant student loan debt and be underemployed.

The second, larger group will graduate high school and likely never secure a certificate, endorsement, diploma or associates degree, and they will lack employable skills. An underemployed and overeducated young workforce will be detrimental to the long-term health of our economy and society. Furthermore, it does not allow the vast majority of high school students and young adults the chance to explore, find and develop talents in an authentic environment. Learning, applying skills, finding gainful employment, and securing financial stability are all part of one's overall quality of life and happiness. One of America's greatest educators, Booker T. Washington, reminded us of how this type of fulfillment can be achieved. It is as true today as it perhaps was when he wrote it in 1938:

Happily the world has at last reached the point where it no longer feels that in order for a person to be a great scholar he has got to read a number of textbooks and that he has got to master a certain number of foreign languages; but the world has come to the conclusion that the person who has learned to use his mind . . . that the person who has mastered something, who understands what he is doing, who is master of himself in the classroom, out in the world, master of himself everywhere, that person is a scholar. (Gordon, 2014, p. 32)

Conclusion

This historical analysis of work-based education in North Carolina indicates that while there has been a clear evolutionary timeline, some older and traditional practices have resurfaced as potential benchmarks for future considerations. In recent history, the pendulum of public educational policy swung toward an emphasis on preparing students academically for college. Budgetary pressures also limited specialized work-based education activities in the world of CTE. According to the expert practitioners who

participated in the oral history portion of my study, these two factors heavily influenced program models and restricted the types and availability of work-based education for secondary students. The practitioners also described how more recently, the CTE programs have modernized and expanded to include high-skill programs with more rigorous technical requirements. These specialized course offerings provide clearer pathways to careers that may or may not include four-year university degrees. Accompanying these changes is a resurgence in prioritizing work-based education to support the technical activities. Many of the experts I spoke with also expressed how valuable the work-based learning can be to develop skills for all careers, such as communication, collaboration, responsibility and reliability.

In the next chapter, I will examine how the individual accounts of students currently participating in work-based education fit in the context of the historical perspectives of these expert practitioners.

CHAPTER V

FINDINGS: VOICES OF TODAY'S STUDENTS

The findings in the previous chapter provided a history of work-based education in North Carolina gathered through the oral history testimony offered by expert practitioners. In this chapter, I present the findings from my general interpretivist qualitative research that I used to investigate the perceptions of twenty high school students currently participating in a work-based education program called Career and Technical Education (CTE) Internships. I interviewed the students to understand how their reported experiences with internships related to their attitudes about high school and their post-secondary plans. In addition to individual interviews, I also conducted focus group interviews with a portion of the twenty students, and then observed four of the students in their workplace settings. After collecting the interview data, I used qualitative analysis software to organize common themes by organizing excerpts of student accounts into eight different codes. Some of these codes were broken down into additional sub-categories

To present my research data in this chapter, I divided the interview and focus group findings into eight main themes or topics. I thoroughly describe each of these themes by providing supporting statements and accounts from the participants. After presenting the themes representative of my study's interview and focus group data, I

provide a brief overview of my findings from my four site visits. I conclude the chapter with a summary of the data.

Themes from Student Participants

As the data gathering process proceeded, it was immediately obvious how several common themes emerged. Despite the diverse backgrounds of the students, and the different types of internships they experienced, they began repeating common refrains when providing their accounts and opinions. These common threads became codes by which I was able to organize and categorize particular topics and sub-topics. In some cases, I was able to use names for these codes that came directly from the students' statements, and in other cases I coined phrases or descriptive words which I thought best suited the information that was gathered.

Initially, I found myself drawn toward specific topics (or codes) that seemed positive in nature, or ones which cast the experience in a positive light. However, as the number of interviews increased, and the focus groups were able to expand their conversations on specific areas, I also became aware of several very specific themes that the students identified as not favorable, and even troublesome in nature. In these cases, I was reminded of the importance of being aware of my own positionality, and making sure that I allowed the students' own voices to speak for themselves. My only filter needed to be the research questions themselves.

I did encounter some outlier data in this research, and areas where there was very little information to inform specific parts of my research questions. In these cases, I assigned codes that were used infrequently, but tagged as significant data nonetheless.

By the end of the data collection and analysis process, I identified eight primary or ‘parent’ codes. Of these eight, six had ‘child’ codes, which contained subsets of the main idea or theme which was identified. There was a total of nineteen child codes, which allowed me to further categorize and sort the data. Table 6 contains a complete list of the codes and the frequency of identification.

Table 6

Theme-Based Coding: Frequency and Percentage of Total

Code	Frequency	Percentage of Total
Empowerment:	13	5.7
Freedom	7	3.0
Responsibility	22	9.6
Self-pride	6	2.6
Being Productive:	10	4.4
Helping People	7	3.0
Making Money	11	4.8
Staying Busy	5	2.2
Real Life or Real World:	19	8.3
Hands-on	4	1.8
Building Skills	10	4.4
Relationships:	13	5.7
Peers (other students)	9	3.9
Parents	11	4.8
Boss & Coworkers	9	3.9
Teachers	4	1.8
Future Plans:	3	1.3
Careers	5	2.2
Graduation	4	1.8
Difficulties and Struggles:	17	7.5
Time Management	11	4.8
Demands of Job	15	6.6
Uncertainty	3	1.3
Waste of Time	2	0.9
Gender:	4	1.8
Race:	4	1.8
<i>Total</i>	<i>228</i>	<i>100%</i>

These codes represented the central themes of my findings. When assigning codes, I included all transcription media gathered in both the individual interviews and focus groups. I describe each of these central themes in more detail below

Empowerment

Listening to high school students talk about their lives and their experiences in high school is a privilege. It reminds me of the critical role educators have in carefully designing and implementing programs of study, and the influence we have on their futures. It also proved that many students can be highly reflective about their own lives and experiences. Throughout the interviews and during my interactions with students on-site in their internships, I heard language and detected emotional signals about the topic of empowerment. Many teenagers yearn for the idea of gaining more autonomy and self-determination. Students in high school who are at or beyond their eighteenth birthday face the excitement of becoming adults. Yet at the same time, they often find themselves confined by and bound to the same structures and rules of their younger adolescent classmates. Being treated like minors, while being legally classified as an adult, is a conflicting predicament. Many of the students I interviewed expressed this tension and appreciated how the internship provided an opportunity to be autonomous. Jamal, a Black male who works at a local fast food restaurant, explains:

Having more flexibility in your schedule and basically being able to have freedom and leave when you choose. Being able to schedule your own work and not have to sit in a class and have someone give you deadlines, stuff like that.

Not only did the students appreciate the opportunity to be “free,” but in some cases, they understood that with this freedom came a new opportunity. Landon, a White male who works at a local auto parts store, described it this way:

The internship, well, it gives you more freedom. You can go out, and you can work, but you got to have the mentality and the things that do right when you get that freedom. During the class, you got a teacher standing right there over your shoulder. Internship, you don’t. You get to go out, and you get to actual have fun while you work.

As more students expressed similar sentiments, I discovered there were nuances in their experiences related to empowerment. Some students focused on the freedom it provided, as mentioned above. Others acknowledged the responsibility, as again was the case for Jamal:

It’s . . . you have freedom, basically. You can manage your time the way you want to do it. I think it prepares you to take responsibility for how you want to earn your credits and stuff like that instead of sitting in a classroom and having to sit there and just listen the whole time.

Taking charge and owning your actions and decisions seemed very appealing to these students, in a way that they claim doesn’t always happen in a traditional classroom setting.

One student, Harmony, who is Multi-racial, divulged to me that she had been diagnosed with a mild form of autism. She struggles with her disorder, and knows it has affected her ability to succeed in school. She spoke at length about her internship experience at a local fast food restaurant, where she worked as a Hostess. Her primary job was greeting customers, cleaning tables, and attending to the diners’ needs while they

ate. In the individual interview, she described the enormous sense of pride she had when she first secured the job:

Harmony: I've been going to this [fast food restaurant] all my life, so I knew this is where I want to first start. I went to the interview, I found out they had interviews on Tuesdays and Thursdays. I went to my first interview, and they interviewed me. Then 3 other people interviewed me when they called me back about 2 weeks later.

Researcher: Were you excited?

Harmony: I was very excited.

Researcher: 2 weeks is a long time to wait, though, isn't it?

Harmony: It is.

Researcher: How did you feel while you were waiting?

Harmony: It was pretty scary, but I had confidence that I was going to get it.

This excerpt illustrates how securing an entry level job at a fast-food restaurant can have a powerful impact on the sense of self-pride and dignity of a high school student with a disability. Work-based learning activities such as this can have a significant impact on the life of a young person. Securing gainful employment and being successful outside of the school environment in the adult world was very powerful for this student.

Angela, who took on an internship at the community wellness center working with the afterschool and summer camps, reflects the impact of the experience again. She described her experience as one where empowerment, responsibility and self-pride all connected.

[At school] The teacher's in control and then when I'm at work I'm in control and that I have these kids that are like in my care at the time. I guess it is a difference there. On the job you can learn things about yourself and it kind of clicks by yourself and then in school you have teachers like you have to know this. They're sitting there telling you. [At work] I guess you learn on your own.

I coded the theme of empowerment in the data 48 out of 238 total notations, making it one of the more frequent topics of discussion mentioned by the students.

Real Life or Real World

Work-based learning experiences, and internships in particular, are considered to be authentic because they exist in an actual workplace, where students are performing many of the same duties and tasks that are required by full-time employees. This differs from a classroom-learning environment, where students typically spend their time practicing skills or acquiring knowledge through simulation or constructed scenarios. Despite this, school is not an artificial environment. It is a very real experience that is an integral part of our society. It is a shared experience that is common to most everyone in our society. Participants in this study still differentiated the two experiences by thinking of school as a preparation for something that comes afterwards. Preparation leads to action, and in the case of the internships, the students frequently used words and phrases like "real life" or "real world," or "actual job" or "real job" to describe an ultimate purpose or goal after education.

Tyler, one of the interviewees, ranks near the top of her class. She takes challenging courses and participates in many different clubs and activities. She is an officer in the Future Farmers of America, a member of the Student Government Association, in the Art Club, a member of the National Honor Society, and two sport-

athlete, and has a busy hobby of breeding and selling hunting dogs with her family. She is what most would consider an accomplished high school student, fully engaged and successful academically and in many extracurricular activities. She also works at a fast food restaurant for her internship, and describes how she sees school versus work in this way:

When going to work, I do get more hands on. I can actually work, and I'm actually experiencing it in the real world, where here at school, in class, they just prepare me for the real world. They're just preparing me to go out there, but the job is actually sending me out there to do it.

Jaden, a Black female, is also a good student. With successful grades and a challenging course load, she plans to attend college and have a career in the medical field. She works 15 - 20 hours a week for her internship experience as an associate at a local trampoline park. She also uses the same language to differentiate the school and work experience, but also touches on skill development that is not always a focus in school.

I feel like [the trampoline park], the job, teaches me a lot more about real life stuff, like hands on, like how to deal with people whenever they get angry, and how to be cordial, and asking my bosses for time off, you're going to have to be professional with that, and stuff like that. School of course just gives you knowledge, how to math and give change back and stuff like that, so it's like, yeah, you need both, but they're both two totally different sides.

Jaden went on to describe how interactions with customers helped her develop confidence with communicating, solving problems, and resolving conflict.

Some customers get really angry a lot. It seems like that kind of place really lends itself to people wanting discounts like on their time to jump and stuff and so

whenever their discounts don't work or their coupons, they get really angry, and that's never fun. It's kind of in a bad area too, so you're going to have to deal with people who aren't necessarily nice. You get that too sometimes where people are just kind of mean and rude and you have to know how to deal with it and fix it without it causing a whole bunch of drama.

Maria is an athlete, and not in the typical sense. She is a star player for the girls' soccer team, and runs track quite well, but aside from school sports participates in amateur boxing. She has a winning record of 5-2, and also brags of an unofficial defeat of her male cousin in the same weight class. Maria works as a waitress at a restaurant for her internship, and reflects on her school versus work experience this way:

Well, in my opinion, I think the working environment is actually really good for students because that way, they learn how our parents actually work for our money, and then that it's not that easy and they also learn a lot from real work. Even a lot from people like customers who come in, there's a whole bunch of talk with different people. Then they just tell you stories or they give you advice of life and stuff that you can make use of it if you want to, and if not, then okay but you learned a lot there with life experiences.

Braxton is a White male senior who doesn't have plans to go to a four-year university. He described his high school experience as being "a little rough," but at the same time says, "I like this school. They have good principals and peers and stuff." He enjoys working and has had many odd jobs during his teenage years. For many years, he helped his stepfather with his lawn care business, mowing grass and landscaping. He also worked a stint as a cashier at a local fast food restaurant. Recently, he began his internship at the nearby package shipping company distribution center. He works second shift as a logistics technician, helping organize and process shipments. His opinion about

the value of his internship also ties into the notion of “real world”, and the importance of gaining practical experience. Braxton offers his opinion about what this means to him:

I don't think high school is strict as they need to be to prepare people for the real world because there's a bunch of things kids do here [at high school] that they should get in more trouble or more action done or get some so they recognize that it's not right, it's wrong. It [the internship] gives you more opportunity to interact with real world situations . . . [at the shipping company] . . . and you're with the same people every day. I see different people every day and different attitudes every day and different situations every day. Today it's not going to be the same. I'm not going to have the same situation I did yesterday. I go through different obstacles every day. Here [at high school] it's kind of the same routine every day, same thing. With [the shipping company] and the CTE internship I have to write down what I did. As I'm writing I think of other ways I could've done it differently or better or not done this or done that instead. It's making me think about and learn from it.

Clearly, his reflections are linked to this idea that what he is doing at his job is beneficial in preparing him for his future in a practical and meaningful way.

Two other students expressed some frustration in not understanding the connection of what is taught in school and how it will help them in the “real world.” Jesus, a Hispanic male with an interest in technology and computers, expressed this concern about his high school curriculum:

Why not teach everything you need in life, but you teach math, AP Calculus when you're not really going to go into the field? It doesn't make sense. Why do they make us take these classes?

Samantha, a White female who works at a community wellness center helping supervise the youth afterschool and camp programs, echoed this same sentiment:

At the internships, they're teaching me about life, and at school I'm just learning English, right now I'm learning Hamlet. That's not going to help me in life. My kids, they're helping me in life and they're helping me to grow up.

The disconnect between school and preparation for life afterwards was a common theme among the high school student participants. As evidenced by the comments from these students, it is sometimes difficult for them to see practical applications for what they are learning in the classroom. Many students separate the internship experience from the school experience and provide a contrasting description of each. However, for John, a White male, there seemed to be a complementary connection, and an awareness of why both are important.

[at the internship] You don't have to worry about homework and classwork. It's like you show up and you get hands-on experience. You show up and if something needs to be done and you don't know how to do it, you get taught. That way the next time you need to do it, you'll know. It's like real world experience. It's almost like I'm working. It's not even really a class to me. I don't think of it as a class. I feel like it's working because I have hours I have to log. I have things I have to do. I have a boss. I treat it like a job but I also remember that it's a class too.

So, while some might consider the Oakes (1985) argument that CTE is a separate track of study reserved only for low skill, low wage jobs for minorities, students such as John see it instead as an authentic endeavor which helps prepare him for a productive adult life.

Being Productive

Yet another theme emerged that associated value and positive outcomes with the internship experience. Whenever students described results or outcomes, or described how they felt a sense of achievement or accomplishment, I coded it under the phrase of

“being productive.” There were several child codes under this umbrella, including “helping people,” “making money,” and simply “staying busy.”

Harmony, a Multi-racial female with an autism disorder discussed previously, described one of these accomplishments with deep emotion and conviction. When asked, “What are some of the best things about work, about doing this internship?”, she looked directly in my eyes, and without hesitating, responded, “Serving others and putting others first, and being there for people when they need you, or being able to talk to them.” I was somewhat surprised by this very direct and powerful answer, especially since she works as a hostess in a fast food restaurant, which many in society tend to equate with menial labor. In fact, Harmony herself sees great value in being able to attend to people’s needs at her job, and demonstrates pride accordingly.

Angela, a White female, completes her internship by working as a teacher assistant in an elementary school that is located beside her high school. Interested in a career as an educator, it was no surprise that a source of satisfaction for her was helping her students. When asked about what she likes about her internship, she explains:

I guess like when I help other students out, like if I understand something and they don’t, I kind of see myself as helping others. Then when they get it and I know that they get it, then I guess that gives me something to look forward to, it makes me really happy.

Samantha, a White female who works at a community wellness center, also talked about this same feeling. Although she found herself somewhat stressed with the younger children, other patrons inspired her.

They [young kids in afterschool care] test my patience every day. Lifeguarding is different, in the mornings, they have a water aerobics class, it's mostly older women. They look so happy, and that makes me look forward to getting to their age. It just could change my life completely. I love it.

Not every student had such altruistic views regarding what it meant to be productive. For many, it was all about the money. In some cases, the students explained that they were actually helping support their family. Tyler, a White student who plans to attend East Carolina University to pursue a career as an educator, explained her difficult financial and family situation.

Yeah. Trying to save for college, and I pay all my own bills now. I pay my car insurance, I help pay my phone bill. My parents need something, I help them because my dad's been disabled four years. My step mom, she's disabled as well. My mom's not in the picture. I have to try to work to help them out. I don't really want to have that burden on them of, "her insurance is due tomorrow," or, "Hey, her cellphone is billed tomorrow. Hey, she needs gas in her car." I don't really want them to have to struggle with that, because I want to be able to help them, because I know that they don't have it. I don't have that option.

Jaden, a Black female who doesn't face quite the same financial pressures, but still faces pressures to be financially independent, told me about her situation with regard to making money.

I'm trying to save for a car, and my parents are like, "Okay, you want a car, you got to work." I was like, "I don't know if I can do this," but it's okay, I'm saving and I'm going to get a car soon, so yeah. That's another thing I've learned, is saving. Now that I have money, I never really had large amounts of money before, and now I'm having to learn to save and budget my money. Like okay, I want to go out, but should I? Stuff like that. I'm still trying to work through that.

Others simply saw the internship as a means to an end. Samantha, a White female, told me the reason for doing the internship in a single sentence: "I want to make

money, a lot of money.” A few others saw making money as a good way to learn about financial planning. Maria, a Hispanic female, explained it this way:

It gives you the opportunity to actually go out there and experience working, which is not easy as people assume. Then it also helps you know how to manage your money because some students, they just ask and ask their parents but they don't really know how they get it or what they have to go through. That way, they actually know and then they have to see, “Oh. I have only this amount. I have 7 days to let it go,” like for gas money and all the other things you need.

Seven other students mentioned making money as one of the reasons for participating in the internship. Most of these did not focus on it as a primary reason, but rather as a side benefit. Maria said, “It's better than just staying in class like you would and then if you have a job you can make money rather than studying.”

Not every internship was a fully paid experience. A few volunteered or received a nominal stipend for their participation. In a few of these cases, students explained they simply liked to keep their time occupied. It is not uncommon for many seniors to have a partial load of classes. Having already satisfied nearly all of their graduation requirements, many seniors take only two or three classes during the four-period day. This frees up their daily schedule considerably, and participating in an internship can be a good way to fill that time. Braxston talked about why he thinks it is important to stay busy:

For some people I think it is a bad thing for them because they don't have a job and they're just bull crapping, doing nothing, just causing trouble or doing whatever. Others I think is a good thing because you can go start work early.

He went on to explain,

I don't like laying around the house and doing nothing. Getting out of school at 1:50, it does me no good if I have nothing to go do. If I'm going to go burn gas I gotta have some way to put it back in. I do like to work. Ever since I've started working I like to stay with it and keep busy.

High school students describing the importance of "being productive" may seem a bit counterintuitive when most think about the stereotypical teenager. However, these students expressed a genuine desire to have worthwhile and fruitful ways to spend their time. Engaging in authentic activities in a work environment outside of school seemed to certainly be one way to fulfill that goal.

Relationships

Students who participate in the internship program interact with different people and in different ways compared to their interactions in the regular school environment. During the course of a typical school day, students conduct their activities as subordinates to their teachers and administrators. At their internship site, students are sometimes entirely immersed in the adult world. Their supervisors and peers are usually adults, and often times the customers or patrons they serve are adults as well. This change in dynamic from their typical high school day provides an opportunity for different types of relationships and interactions to occur. The students noted these differences and explained how they were significant.

Jesus, a Hispanic male, works at a local supermarket stocking and bagging groceries. He chose to share how his relationship with his supervisor made an impact.

She [his supervisor] talked to me about what I could get in life and the experience I could build off with it and the meaningfulness of it—like how to get along with my coworkers. I never would have thought I would have made friends like I did now. They allowed me to mature more than I ever thought I would be able to in high school.

He also spoke about the time he spent with the store manager, also a person who he cared about and admired at work. “My manager, he was in two wars. One in Iraq and one in Afghanistan. When we’re on break he’ll talk about his stories. I really like being around him.”

Other students talked about the relationship with their coworkers and the camaraderie they developed with them as well. Vonya, a Black female, works second shift at a large cosmetic manufacturing company. Her duties involved working with a team of coworkers on a production line that makes lipstick. She explained why she liked her work environment in this way:

I would say people at work, if you are surrounded by the right people, surround yourself around the right people, then you wouldn’t have a problem doing anything, because they would encourage you, they would make sure you get everything done. I think that’s what helped me most of all, the people I surrounded myself by.

They also noted how other adults like their parents and teachers thought about their experience, and the opportunities it presented them. Jaden, a Black female, talked about how her parents felt about the internship in this way:

Oh yeah, I told my parents about it and they were like, “That is amazing.” I was planning on working anyway, so then whenever I found out I could have this, it’s like 10 times better, like that’s awesome. They think it’s really great. I haven’t really told any of my other family, I let my parents know about it. Yeah, they thought it was great.

Jaden also shared how her work supervisor viewed the opportunity, as she described:

They're like, "Oh my gosh, I wish my school had that, that sounds awesome." My boss is really for it. They're like, "That's awesome. That's great. Anything you need as far as hours and stuff, let me know. We'll definitely work with you." They all think it's really cool you can get a credit for having a job.

Landon, a White male who completed his internship at a local auto parts store, did not elaborate quite as much, but said, "He [the supervisor] likes the program. He thinks it's a good experience for the students." He also went on to describe an incident with a customer that turned out to be the beginning of an unexpected relationship:

Yeah. I was actually installing a battery for this lady she had just bought. She was on her daughter's car, and her husband was in the military. She don't know how to change a battery, so it was the original battery in that car since the manufacture date—which was '07, I do believe. When I opened the hood and took the battery cover off, it was like a pile of acid sitting on top of it. Two or three inches deep, so I had to put on my PPE, which is protective personal equipment. I got to remove the acid, and then we had to dispose it in the right way. When I was undoing the battery, I went through a lot of trouble with it, but that's my job. I did it, and they actually gave me \$15 for doing it...Yep. I got the job done. Everybody else didn't want to take the battery, jump on it and change it, so I was like, "I got you." I did it. Since then she's come back to see me two more times. She gave me a card too. I've met some really cool people. There's some really nice people out there.

Landon expressed tremendous pride and joy when describing this interaction and getting to know his customer. It was a clear illustration of how the internship opportunity can lead to unique relationships while in the workplace setting.

Vonya, a Black female, was eager to share how her family felt about the internship as well. Her long shift at Revlon cosmetics manufacturing facility was taking its toll, and she began to question whether she should continue the work. She knew that

she felt supported by her family for taking on this extra role, explaining, “My mama was proud.” Nonetheless, she still explained how she struggled with the situation.

Yes. I talk to my aunt. We was talking about the long hours and I told her I said, “It’s very stressful,” because at one point I wanted to quit and just say I didn’t want to do it no more. I was like, “No I’m going to just do it for this semester and go ahead.” I talked to her and she was like that I was being responsible enough to put my life together, I take the responsibility. She was proud too. I was happy. She was like that she never seen nobody . . . Because most of the people I met at work, they was like they ain’t never seen no high school student that got off at 2 [2:00 pm] and they had to come straight to work and get off at 1 [1:00 am]. Everybody was like, that was a life changer right there.

So, while her challenging schedule was difficult, the relationship with her family and coworkers, and their moral support helped her see the bigger picture and persevere.

John, a White male who worked with the school’s technology department, noticed how his role in tech support allowed him to develop relationships and interact with his peers in a way that he did not ordinarily get to do. His high school is a one-to-one environment, and students can bring their MacBook to a special tech-support office for assistance during the school day. Part of John’s assignment was to serve as a support technician for his peers.

I get to work with all the kids starting from ninth grade to twelfth grade. Anybody who ever comes in [to the tech department] and needs any help, I get to work with them. I get to learn what they do, what they like while I’m fixing something. We’ll have small talk. And I get to work with senior techs across the county. It’s not like you just go and you see that one class a day and some other class. I have a regular class. I sit in there, and I don’t really talk to everybody because I’m not there to talk. I’m there to listen and learn. But when I’m there in the internship, you get to talk to them [the other students]. You get to learn some things from them. You get to talk to them while you’re helping them do something. It’s an awesome experience because you get to see everybody in one class period instead of seeing the same thirty people every day at the same time.

High school students are traditionally accustomed to interacting with adults while in school, however in nearly every instance it is with a teacher or administrator to whom they are subservient. While in the work-based learning environment, they may interact with other adults as peers, which can provide interesting and unique opportunities for new relationships. These relationships can often lead to opportunities for personal growth and a broadening of social and emotional perspectives.

Future Plans

During the interviews, the topic of “future plans” usually came up in the conversation. When prompted to talk about their high school experience in general, the students usually described what they were planning to do after graduation, and how they were preparing themselves. But for this theme, I was more interested in learning how the internship experience may have impacted these plans, or changed the way the students thought about or planned for their future. Based on their responses, this influence seemed to manifest in two main areas: long-range career plans, or more immediate plans related to achieving graduation on time.

Tyler, a White female, works at a local fast food restaurant. With almost a full year’s experience there, she considers her work role to require considerable leadership skills, especially when it comes to addressing the large employee turnover and constant training of new hires. She aspires to be a school teacher one day, and made an immediate connection between her work duties and her future career plans.

Even though I’m not in a team leader position, I still have the same roles as one. We had new people coming in constantly, because they hire so many new people. There’s always six or seven, when I come in every week, I’m like, “Where’d you

guys come from?” I always have to teach them, “This is how you clean this,” or, “This is how you’re supposed to do this,” or, “Maybe you need to be a little bit nicer with the customer. Try saying this instead.” I’m always doing that, and I’m always preparing things, like at nighttime, I’m shutting things down and I’m teaching people how to do that. It’s just taught me how to teach people and be a leader the way I need to be when I need to teach, to be able to stand up and say what I think is right, and stand up to teach these people what they need to be able to do.”

Others students besides Tyler made connections between their internship and career plans, and not just because they see how they complement one another. Jaden, a Black female, also felt motivated and energized with career plans based on what the internship taught her about what she likes and does not like to do. Although working at a local trampoline park might seem like a fun place for a teenager to work and hang out, it informed her about future plans in two ways:

I know it makes me want to go to college, because I don’t want to do this, I don’t want to work at [the trampoline park] for the rest of my life. I know that’s really encouraged me, like, “Okay Jaden, you really need to go to college because if you don’t, this is where you’re going to be,” that’s not where I want to stay, so that’s definite. I like to be around people a lot, like to socialize and stuff, so I definitely want to do something with people which I already knew that, but this job proved that. I was like, okay, I really like the parties, I like being around the parents and the kids and all that.

So, she was basically able to see what was positive about the job: working with people. But she also realized that that setting and type of work was not a long-term desire.

Landon, a White male who works at an auto parts store, sees a direct connection with his internship and career plans. A self-proclaimed “gear-head,” he explained,

It's [the internship] going to give me the ASE certification. It guarantees me a job when I come out if I want to, if I want to take it, but I don't know. It all depends because I want to start on my own path, my own journey. Then again, it would probably help me to start out somewhere else in another place so I can see how it's ran, and then I know if I want to open my own shop or work for a garage. Also, June 29th, I start at WyoTech [Auto-Tech College] in Pennsylvania, automotive college. It's a nine-month course. Then when I come out, hopefully, I can start my own business, my own shop.

Jackie was a lover of all animals and the natural sciences and hoped to one day be a Veterinary Technician. A Black female, she discussed her interesting hobby of raising Madagascar Hissing Cockroaches. Her collection exceeded 200, and she talked about how pet-like they have become to her. "They don't like when it's raining, or if my room gets too cold. It's like they communicate with me, we have an interesting relationship." Jackie was not able to graduate on time in four years, and at one time even considered dropping out of high school. However, she did persevere and part of the reason appears to have been due to her experiences with her internship, where she volunteered at a local veterinarian clinic, and the counseling she received from the adults at her school.

All my teachers and my counselors kept telling me, I could have been graduated. I could have graduated last year. I was like, no, I didn't want to. This year, I was like, maybe I can. I'm a senior. I only need one class, that's English IV. We was talking about colleges and the internship. I wanted to go to NC State. That has been my goal since forever. When I talked about that with her [guidance counselor], it was like, I wanted to go there, but then, it was other options that are better, and I wouldn't have to go to school for 4 years. I could go to school for two. She told me to go home and look up some more information and come back. My original plan was in January, I graduate early. Then, I start working, and I start volunteering. By the time college rolls back around, I get into college, and I start college. Now, I'm thinking, it's going to be more.

Making plans for the future is something we all do, and these students were no exception. Nearly every one of them exhibited behaviors or expressly talked about

engaging in planning for their life ahead. However, not every student made a connection between the internship and their planning. In fact, I only identified this code 12 times out of the total set of 228, or less than 6% of the time, which was the lowest frequency of all codes. Also, I only identified it existing for 8 of the 20 students of whom I interviewed.

Difficulties

Not every student had positive things to share about their experience with the internship. In fact, there were a few that described it in very unfavorable or dismissive terms. These perspectives usually fell into one of five sub-groups: demands of the job; time management; too easy/easy grade; uncertainty; and, a waste of time.

Some students felt considerable pressure and stress from the demands of their job. In some cases, the students experienced unpleasantness that was clearly objectionable. Cheyenne, a Black female, works at a fast food chain and provided a summary of some difficult encounters with customers:

I've seen a lot. My only experiences just the rudeness coming out of their mouth. I've seen a lady take trash out of her car and throw it into the window at a coworker in the drive-through. That's where all the rudeness comes in at. Front counter is not bad. The rudeness comes from drunks, coming in testing you out, or maybe just rude people in general that are mad because they waited in line. Not my fault. I just take your order and your money. Mad because we didn't quite understand you and it's wrong. Those are the bad times.

She went on later to explain how she felt vulnerable and ill-equipped to handle certain situations. During the occasion she spoke of, her emotions showed through as she gestured and motioned pleadingly with her arms and hands, adding exasperated sighs for emphasis.

It's not easy because you have to control your attitude and you have to also make sure that the customers are pleased and it's not as easy as it seems because people want different things. Then that you are a high school student, you don't really know how to handle all situations. It also takes a toll on you. Maybe the manager is not available in the bathroom maybe. If a customer is urgent about getting their problem solved, it's hard to understand what to do.

Tyler, a White female and also an employee at a fast food restaurant, shared similar accounts of difficult relations with customers.

There was a guy who came through the drive thru last week, he had a blunt [marijuana cigarette] in his hand. He was like, "Do you have a lighter?" "No, sir, I'm sorry." "Can you take it to the back and light it on the stove?" I thought he was joking. He wasn't. He called and complained about how disrespectful I was and how bad my attitude was, but I seriously thought he was kidding. They also don't prepare you for the customers who come through and pay for a \$20 meal in all nickels, and they get mad because it takes a long time. Yeah, that's happened, in all nickels. That was bad.

She also talked about how these contentious interactions compounded the demands of the job, placing considerable added pressure on her life.

A lot of times, when I am working, for some reason they like to schedule me on nights I have a lot of homework due the next day. I'm like, "Okay." Another thing is that they haven't given me that promotion I was really hoping for. That's a drawback, because the business, not owners, but the managers, they can be really rude. I'm just like, you guys need to calm down. I don't know. It's just a drawback trying to handle school and work.

Jaden, a Black female who works at the trampoline park, talked about some of her struggles with her internship as well. Much like the students working in fast food businesses, her position requires a great deal of customer interaction, which sometimes leads to conflict. One afternoon she described an altercation she experienced while

hosting a group of children for a birthday party. Even though she felt she was not to blame for the incident, she feared consequences and was frustrated by the turn of events.

I guess this doesn't sound super serious, but the mom [customer] really freaked out about, like her balloons got popped. She had a whole bunch of balloons for her kid's party and the balloons got popped and she wanted me to pay for them and she tried to claim it was \$40. She got really angry with me, she was like, "I'm going to make sure that you lose your job," and all this stuff. It was so bad . . . I think if you get 3 write ups, you get fired. It's kind of like tallies against you. I think they go away after a certain amount of months, but it's there for a while. If you get written up, it's going to be on your record for a long time. You definitely don't want a write up.

Several students talked about the internship in dismissive terms, implying that is was either very easy, or not a valuable experience worthy of course credit. The structure of the program requires students to submit time records, journal entries, work performance records, and then complete a final portfolio. Students wanting to receive honors weight for the course must also complete a multimedia presentation and present it to a faculty committee. In at least two instances, the students indicated that these requirements were either insignificant or that they were not being held accountable for completing the requirements. Heather, a White female, confided what they had heard from fellow students about the internship program, saying, "I know a couple [of students] that don't really have a job. Really, it's just a free period and they still get credit for it." Cheyenne, a Black female, also admitted that it was only until the end of the internship that she actually understood all of the expectations and requirements. She explained that during the first several weeks of the internship she had no idea what to do.

I didn't know if it was a class that you had and when you didn't work or if it was a class that I had to sit in and then just work after school. I was confused about the whole situation.

Tyler, a White female student, explained that she really only liked it because they could get the "honors credit," which helped boost her weighted grade point average and thereby made her more competitive for admission into college.

Braxston, a White male, summed up the experience in a direct way by saying,

It's easy, it's simple to do. Just go to work and do journal entries, write down my hours, and turn it in at the end of the month. I do a presentation at the end of the semester. It's just simple to me.

While listening to him during the interview, it was clear that his use of the word "simple" was not being used in a flattering way. He also offered very little reflection on the experience and did not elaborate on any questions, basically communicating in a polite way that it was not a very valuable experience overall.

I coded this theme more frequently than any other in the data, and it was also included as a code for 16 of the 20 participants, the second highest behind the theme of 'real life' or 'real world.' This is not to say that there is a strong correlation between students experiencing 'difficulties' and participating in the internship, but rather simply an acknowledgement that many of the students provided data that fit into this descriptor when prompted with the interview and focus group questions.

Gender, Race, and Ethnicity

I had anticipated that addressing the topics of gender, race, and ethnicity with student participants would be a delicate matter. However, during the interviews and

discussions there was no visible awkwardness or outward reluctance by any of the students to engage in this topic. Usually, one of two things occurred when the subject came up. When I asked participants about how race, ethnicity, or gender affected their internship experience, either students shrugged their shoulders and said, “not at all”, or they candidly offered their opinion. In the focus group sessions this was particularly interesting because the students talked about this topic openly in front of their peers.

Jesus, a Hispanic male student working at a local supermarket, talked about his expectations of interactions with those of other races and ethnicities. He expressed a bit of surprise at the way in which he was welcomed into the workplace. He referenced his White female supervisor when he offered these remarks:

She talked to me about what I could get in life and the experience I could build off with it and the meaningfulness of it is like my coworkers. I never would have thought I would have made friends like I did now. They [coworkers] allowed me to mature more than I ever thought I would be able to in high school.

Contrastingly, there was another student who did not have a positive experience during her internship. Tyler, a White female, was frustrated and upset with some of the racist and sexist situations that she perceived in her workplace, a local fast food restaurant:

Racists and sexism, it's bad at work. It's really . . . Like I said, I've straight up been told, “You can't do this because you're a girl.” Customers talking about, “It's just because you're White that you won't do this,” or, “It's just because you're White because of this,” or, “It's just because I'm Black that you won't do this.” I've been straight up told that. It's kind of bad. I've experienced it my whole life. They talk about White privilege and stuff. I'm like, here's a business card, fill out an application. [fast food], they might be sexist, but they're not racist. They will hire anybody. “Hey, come on, get on board.” I'm like, you

wouldn't call me racist, but here's a card, you can fill out an application. They will hire you just like they hired me. I don't know. It's really crappy, especially the sexism thing. Like I said, I worked really, really hard to get where I am today.

In this case, Tyler perceived the racist encounters mostly with the customers who visited the restaurant. She provided two examples of this occurring while at work:

I've gotten called racist because I apparently took less time with, say, a minority instead of somebody that's White like me. Like I said, I take the same amount, I'm like, in and out. I've been complained that I was racist and stuff. I'm like, no, I'm not, I'm sorry. I'm taking the same amount of time. You have people who . . . When you make ice cream, there's a serving protocol for how we have to do that. I make it by protocol and I give it out, "You're just giving me less because I'm Black." No, I give the same amount to everybody. I've gotten yelled at, screamed at. I've gotten somebody thrown a cup at me across the thing. I'm like, "I'm sorry," because I didn't give them enough ice or I gave them too much ice. It's like, okay. It's preparing me for the real world. I'm pretty sure that's going to be what it's like.

The four students who did comment on race and gender did so by treating each issue separately. Each provided comments on their personal identity, and also the interactions with others while in the workplace. Of these four, none of them reported issues related to discrimination, harassment or racial biases based on their own racial identity. However, one student Tyler, who is White, talked about the perceptions of racial identity for certain job positions, explaining that Black or Hispanic persons usually held cooking jobs in the restaurant. She also discussed how issues of race occur with customer interactions. She reported that Black customers had made complaints or expressed dissatisfaction and related the matter to their own racial identity.

Two student participants, both female, did talk about how they felt they were treated unfairly because of their gender. They both reported that they believed they were

not given specific opportunities to perform tasks because of their gender. Tyler, who works at fast food restaurant, talked about this in some detail when she was asked, “does race or gender have anything to do with problems at work?”

I think it does. We have boxes of sauce, I know this is kind of petty sounding, but I was like, “Hey Ryan [male co-worker], let me borrow your box cutter.” “No, you can’t cut it.” “Why not?” “Because you’re a girl.” I’m like, oh, okay. Sorry. They straight up said that. Like I said, they don’t ever . . . They have Hispanic ladies in the morning working in the kitchen, but at night time, there are no women that work in the kitchen, even though like I said, that’s where I wanted to work in the beginning, but they wouldn’t put me there. A lot of women try to start off in the kitchen, but they won’t put them in there, I guess. They’re trying to say it’s more heavy lifting and stuff, but I can heavy lift. I have no problem doing that.

Cheyenne, a Black female who also works in a fast food restaurant, made similar remarks when she stated,

In my workplace, females do the more complicated jobs versus guys take out the trash, they [are] working on the grill, stuff like that. Maybe stocking up all the stuff. Females are taking orders and money. They [the males] are more simple than we are. The females, they are also cooking. Just dropping the food in the grease or mixing the shake or putting ketchup and mustard on a bond whereas guys are over there not doing much.

It is important to note how the gender and ethnicity of the students varied by workplace. Of the 20 students, six worked in the fast food industry. Four of these six were the same students who provided commentary about race or gender (see Table 7). Of the total 20 student participants who were chosen randomly to match the demographics of the school district, approximately one-third, or six students, worked in the fast food industry. Of this six-student fast food subgroup, 83% were Black, Hispanic or multi-racial, compared to the larger group being only 50% minority. Also, 83% of this fast

food subgroup were female, compared to 60% of the larger group. Two-thirds or 66% of the fast food subgroup also reported issues related to race or gender, compared to 20% for the larger group.

Table 7

Fast Food Subgroup: Race, Gender, and Commentary

Student	Internship	Race	Gender	Commentary
Jamal	Fast Food	B	M	N
Jackie	Fast Food	B	F	N
Maria	Fast Food	H	F	Y
Tyler	Fast Food	W	F	Y
Cheyenne	Fast Food	B	F	Y
Harmony	Fast Food	MR	F	Y

The fast food subgroup can be contrasted with a separate six-student subgroup that I called the Career subgroup (see Table 8). These student participants have internships that are more closely related to sectors in the economy that could lead to living wage careers. Of the total 20 student participants who were chosen randomly to match the demographics of the school district, approximately one-third, or six students, worked in the career sub-group. Of this six-student career subgroup, 17% were Black, Hispanic or multi-racial, compared to the larger group being 50% minority. Also, 50% of the career subgroup were female, compared to 60% of the larger group. None of the career subgroup reported issues related to race or gender, compared to 20% for the larger group.

Table 8

Career Subgroup: Race, Gender, and Internship Position

Student	Internship	Race	Gender	Commentary
John	Instructional Tech	W	M	N
Vonya	Advanced Mfg.	B	F	N
Samantha	Local health and fitness center	W	F	N
Braxston	Shipping Company	W	M	N
Landon	Auto Parts Store	W	M	N
Angela	Local health and fitness center	W	F	N

Comparing these two groups of data could bolster Oakes's (1985, 2008) argument that minority students are tracked into certain categories that provide less opportunity for developing high skills and opportunities to earn higher wages. Indeed, the career subgroup of student internships that took place in technology, advanced manufacturing, or logistics did not report any issues related to race, and were also more complementary of the entire experience as a whole.

However, as previously indicated, these internships were not designed as an entry point into a specific career pathway. Instead, they were meant to allow students an opportunity to participate in work activities outside of the school environment, and reflect on how those activities could assist them in the future. Former State Superintendent of Public Instruction, Dr. June Atkinson offered this perspective specifically about the value of working in the fast food industry, "You know, many people would be surprised to know that the training ground for developing teamwork is really the fast food industry. If you think about those jobs, which are mostly held by younger people, it's all about

teamwork.” For students still in high school, working in the fast food industry can be a powerful opportunity to develop soft-skills, earn some extra money, and be a possible motivator to seek additional education so they do not get trapped in a minimum wage job forever. It certainly measures up better than having no work experience at all.

On-Site Observations

Following the individual and group interviews, I then selected the four students with whom I continued my in-depth conversations and observations. Each of these lasted between two and three hours. I narrowed down the candidates for on-site visits based first on their demographics: two male, two female, and at least one African American student and one Hispanic student. I then chose students who had a variety of job types, and who also displayed interesting and engaging dialogue during the interviews. I also tried to choose students who reported a variety in the quality of their experiences, so I could get differing perspectives on the internship experience. Once I selected the participants, I then created personalized schedules with each one so I could spend time with them at their workplace. I began by reaching out to their site supervisor, making sure I had proper authorization to visit the workplace, and explained the purpose of my visits. In most cases, these visits occurred in the late afternoons and early evenings. In one instance, it occurred during the weekend. At the beginning of each visit, I introduced myself to the supervisor and other staff, and set up in a position where I could still observe the participant but be as unobtrusive as possible. I took many notes while on site, and carefully recorded the behaviors and comments made by the participants. Following each of the four visits, I also added notes and reflections.

Site #1: Fast Food Restaurant “Harmony”

Harmony is a multi-racial female who works at a local fast food restaurant in order to satisfy the requirements for her internship. She impressed me in the individual and focus group interviews. She spoke slowly and deliberately, and came across as a very humble person. Yet she also projected a unique sense of self-pride and confidence. Early on in the individual interview, she told me she had struggled in school because she was diagnosed with a mild form of autism, and that she received special services from the Exceptional Children’s Program. Harmony also came across as a very kind and happy person. She smiled often and talked about how important her family and friends were to her. She was also particularly happy and proud of her internship. When I asked her how she got the job, she beamed and enthusiastically described how it occurred:

Harmony: I’ve been going to this [fast food restaurant] all my life, so I knew this is where I want to first start. I went to the interview, I found out they had interviews on Tuesdays and Thursdays. I went to my first interview, and they interviewed me. Then three other people interviewed me when they called me back about two weeks later.

Interviewer: What did you do to get ready for the interview?

Harmony: I dressed up, prepared my speech of what I wanted to say and stuff.

Interviewer: That was smart. Why do you think they hired you?

Harmony: I put others before myself. I can’t explain. [smiling proudly]

While I observed Harmony in the workplace, she demonstrated this same enthusiasm and pride. At first I thought perhaps my presence was affecting her behavior, and that she might be seeking my attention, but as time passed during my visit, her

behavior did not change, especially as she repeatedly interacted with customers. Her position at the restaurant was as a “hostess.” It was her job to greet customers, circulate through the restaurant, and attend to their needs. She gave the patrons refills on their drinks, brought them condiments, and bused the tables. She also checked on the children’s play area to make sure there were no problems there.

She explained to me that she was trained to make sure the customers were satisfied with their visit, and tend to their needs. It appeared that she genuinely enjoyed the work, and especially in interacting with the customers. It was also evident that she was required to communicate with many different people frequently during her job. Most of these people were strangers, but I did notice on at least two occasions that she seemed acquainted and extra friendly with some of the customers. Afterward, I asked her if they were her friends, and she replied that they were just “regular customers” and that she liked treating them special.

While Harmony was not one of the students who reported issues of gender or racial discrimination during her internship, I did wonder about how her disability might impact her experience. Because she did not bring the subject up, and because she appeared to be so successful at her job, I decided to respect her privacy and not broach the subject. However, I do think that this could be an area to consider for additional research.

Site #2: Trampoline Park “Jaden”

Jaden is a Black female who works at an indoor trampoline amusement park located in the nearby metropolitan area. Jaden caught my attention primarily because she

really did not enjoy her internship very much, yet still talked about the reasons why she felt it was a valuable experience. She is an articulate person who ranks high in her class. She has plans to attend college after graduating high school and pursue a degree in the medical field. Her job at the trampoline park is to check guests into the facility and assist with customer service, particularly as it relates to special events and parties for children. She frequently interacts with the customers and tends to their requests and needs while at the facility. She also helps enforce the rules to prevent guests from becoming injured while playing on the equipment.

This was actually Jaden's first paid job, and she described how proud she was to obtain the position:

There was a job fair, and so, it wasn't even like you really need an application, you just got your resume and you went straight into the interview, and I interviewed with two people and then they called me like a week later and was like, "Hey, you got the job." I was really excited because I was so nervous because I have never done an interview before, that was really the first job experience ever, and I was so nervous, and I was so excited. I had been looking for a job, but there's not a lot of places to work around here because it's so out in the country. I didn't want to work in fast food because I just, I don't know, grease. So, when I got that job, I was so excited. I was like, "Oh my goodness."

However, the excitement didn't last long, as Jaden described how she really ended up not enjoying working at the business. She cited several examples of rude or dissatisfied customers as the main reason. She also realized that this experience made her want to attend college and pursue a professional career in health care. However, during my observation at the trampoline park, I noticed that she didn't seem angry, upset, or unhappy to be at work. Again, I thought perhaps my presence could be impacting her

behavior, but I believe that Jaden actually understands that in a role where you are required to regularly interact with customers, it was better to at least outwardly display a certain level of congeniality. I asked her about how she felt while at work, and she replied that it was fine, but she would be happier when her shift was over. While there, I observed her wiping down plastic padding and other surfaces with cleaner and rags, a task she later described to me as being “gross.”

Ultimately, Jaden’s experience at work seemed like the type of job where the biggest benefit was perhaps appreciating the value of developing skills for a professional career. In her own words, she explained how it affected her:

I know it makes me want to go to college, because I don’t want to do this, I don’t want to work at Sky Zone for the rest of my life. I know that’s really encouraged me, like, “Okay, I really need to go to college because if I don’t, this is where I’m going to be,” that’s not where I want to stay.

Site #3: Auto Parts Chain Store “Landon”

Landon is a White male who has an affinity for all things related to the automobile. He is a self-described “gear head” who finds great satisfaction in working with his hands. He does reasonably well in school, but has struggled in the higher-level math and English courses required for graduation. He plans to enroll in an automotive college after finishing high school so he can secure his technical certifications required to work in dealership garages. His CTE internship took place at an auto parts chain store. Landon’s job is to serve customers with their auto parts needs. It occasionally requires troubleshooting mechanical issues customers may have. He also performs basic

diagnostic tests on some customers' vehicles as well as the installation of batteries, fuses wiper blades or other easily accessible parts.

When I first met Landon, he was very enthusiastic about his internship. He was also very excited about finishing high school and was finalizing his plans to attend a post-secondary program for automotive technologies. He spoke about how the future of automobile service was heading toward electronics and advanced computer technologies, something he was eager to learn more about. Although not an actual garage setting, he felt like working at AutoZone was a good way to learn about many different types of automobiles, as he explained, "you get every kind of vehicle there." However, I did learn that shortly after my visit to his work site, he quit his job there and found a new job working at an automotive garage, where he had more opportunity to actually repair vehicles.

During my visit to Landon's workplace, I observed him interacting with dozens of customers. In most cases, he simply served as a cashier, but in a few instances, he engaged in complicated technical conversations helping the customer determine what they needed. It obviously required a certain degree of expertise, and also the ability to use the store's computer database to research parts and check on availability and pricing. It also required strong communication skills. In one case, Landon needed to utilize logical, deductive reasoning to help the customer identify what the potential problem was with their car. He comported himself well during the time I was there, projecting a sense of confidence and self-assuredness that belied his youth.

I was able to have a very brief conversation with Landon's immediate supervisor, and he also described Landon as being very knowledgeable and capable with all things automotive. He was impressed with Landon's willingness to pursue his career interests while still in high school. At this job, Landon was paid almost \$10 an hour, and was eligible for bonuses based on his completion of company training modules. I later learned that another reason Landon left the job at AutoZone was the almost \$12 an hour wage offered to him at the garage. It was apparent that Landon already understood the opportunities for advancement, explaining that some dealerships can pay certified mechanics as much as \$1500 a week depending on how productive they are. He told me that his ultimate goal was to have his own business, which he believes will happen one day, as long as he continues to follow the opportunities he earns for himself.

Site #4: School District Tech Department "John"

John is a White male student who completed his internship by working with the school district's Technology Department. John secured this position after successfully completing a series of CTE Computer Engineering courses in high school. He was able to officially certify in several areas of computer repair and basic programming, which gave him the chance to interview for the job with the school district. John is also a very successful student who plans to attend a four-year university to study computer science.

Observing John in the workplace turned out to be a bit more complicated than I first thought it would be. As it turned out, John spent very little time working at his own high school, instead alternating between a nearby middle school and elementary school. He also worked occasionally at the central office for the Technology Department where

the main servers and hardware were housed. The middle school where John worked was a 1:1 school, meaning each student was assigned a laptop device, so he spent most of his time there servicing those devices. At the elementary school, he spent some of his time helping staff members with their technology needs, which included assisting with printers, overhead projectors, smart boards, and teacher laptops. He did not interact with students regularly at that site. Also, under the supervision of the adult technology staff, he occasionally assisted with repairs to the network infrastructure at these schools.

John is a very friendly and outgoing person, which is somewhat contrary to the typical tech-geek introverted stereotype associated with people working in this field. He described himself as a “techie,” and said he spent a lot of his free time playing video games or working on his own computers at home. He also said that he is very active in his church and enjoys participating in service projects to help his community. This also exemplifies his outgoing personality and adeptness in interacting with others.

During my visits with John, I observed him performing solitary work and also interacting with what he called his “clients.” The first time I shadowed John he was repairing student laptop machines that had cracked screens and missing or broken keyboard keys. I mostly talked with him about the technical aspects of the work, and was impressed to see how quickly he was able to make the repairs and follow the inventory process that was established at the school. During my second visit with John, he was interacting with several teachers at the elementary school. While there, I watched him visit a teacher’s classroom during her planning period so he could trouble-shoot her printer. He was very cordial and efficient with his time, and was able to re-install the

software needed to make the printer operable again. The teacher was very pleased and complimented him on his skill. What stood out to me about these visits was his confidence, both in the technical ability needed to perform his work tasks, but also in his interaction with adults. His activities required a lot of independence and self-direction, and it was apparent he was very successful. Later on, I had a chance to speak with the Director of Technology about John's work performance, and she said that she was going to offer him a job over the summer after his graduation, and that she hoped he would continue to consider working for the school district in the future. She stated further that he was so good that she would hire him on as a permanent employee if he were willing. The starting salary for this position was \$35,000 a year plus benefits. As it turned out, he did not accept the position, but instead decided to pursue his college career.

Site Visit Summary

These four on-site visits did not yield much in the way of directly quoted remarks from the students or others at the workplace. In fact, I never expected them to. Instead, I was able to better understand some of their previous commentary by seeing them in action first hand. One behavior that I witnessed with all four students was a sense of pride and self-confidence. Based on my years of experience as a classroom teacher and administrator of high schools, students in a school setting generally tend to act deferentially or even subserviently toward adults. Because they are usually surrounded by their peers, they often operate in a default mode that is somewhat passive. In the workplace, these four students were instead much more assertive and operated with a sense of control and purpose. This was interesting to consider and it confirmed some of

what I learned in my review of the related research about constructivist learning, where “active learning and engagement in authentic activities takes place in the social culture of practice” (Brown, 2006, p. 11)

Conclusion

During my interactions with all of the students in the interviews, focus groups, and site visits, they offered candid perspectives on how they felt about the internship experiences. On the whole, the commentaries and perspectives of these individual students provided a rich and detailed picture of what this work-based education program entails for these students at three high schools in this school district. Eight themes emerged from the data gathered in the interviews, focus groups, and on-site observations (see Table 9).

Table 9

Code Count Totals

Themes	Code Frequency	Participant Count
1. Empowerment	48	15 of 20
2. Being Productive	33	18 of 20
3. Real Life or Real World	32	15 of 20
4. Relationships	46	16 of 20
5. Future Plans	12	8 of 20
6. Difficulties and Struggles	48	16 of 20
7. Gender	4	2 of 20
8. Race	4	2 of 20

The participants neither unanimously celebrate the experience, nor did the majority find fault with the internships. Instead, their accounts offer a spectrum of ideas

and opinions, which may have implications for program design and administration.

There also exist some considerations related to the specific gender and race/ethnicity of the participants, which I will explore in Chapter VI.

CHAPTER VI

SUMMARY, ANALYSIS, AND IMPLICATIONS

Introduction

The purpose of this study was to explore how CTE work-based experiences impact secondary students' attitudes and plans. Specifically, I sought to understand students' attitudes about, success during, and plans following participation in work-based experiences. Research specific to outcomes and experiences of work-based experiences for secondary students is minimal, although the specific characteristics of work-based study have been established. This absence of research is particularly true when searching for the nuanced factors regarding work-based experiences that contribute to students' attitudes and experiences in secondary school, and the impact these decisions have on successful completion of high school, as well as their plans beyond.

This chapter highlights the major findings from my study. I begin with a review of my original research questions, and then I provide specific answers to those research questions by summarizing the findings I presented in Chapter IV and V. I also analyze my findings by referencing the existing research literature that I originally discussed in Chapter II. Following this discussion, I address the theoretical and practical implications of my study's findings and specify the study's limitations. I conclude by offering recommendations for future research on policy formation regarding Career and Technical Education and Work-Based Experiences.

Findings, Summary, and Analysis

This research study sought answers to the following questions:

1. How do today's student work-based experiences and practices relate to the historical progression and development of CTE in North Carolina?
2. How do work-based experiences inform student attitudes about and success in high school?
3. How do work-based experiences affect students' post-secondary plans?
4. How are these attitudes informed by the students' gender and race?

As I interviewed the expert practitioners and students currently participating in the internships, I began to realize answers to these questions. I was encouraged by the quality and quantity of information that I was able to gather, as I believe it helps contribute to a deeper understanding of work-based education for secondary students. The answers to these four questions, when considered holistically, provide a compelling interpretation to consider.

Connecting History to Current Voices

The data collected and presented in Chapter 4 shows that the expert practitioners perceive a recent decline in the quantity and types of work-based education available to our public high school students. Ruth Huff, retired CTE teacher and now Executive Director for NCACTE recounts, "I remember a time when we were running full-blown internships and clinical rotations. We seem to be doing less of that now, and it is a shame." The NC State Director for CTE, Jo Anne Honeycutt, also expressed similar concerns, stating,

In the 1980s, there was a report called ‘A Nation at Risk’. Basically, it planted the seeds for a movement that really gained steam into the early 1990s. It made our high school graduation requirements start to look more like admissions requirements for colleges and universities. It also fostered an anti-Voc-Ed sentiment, and encouraged this feeling that all kids should go to college. It de-emphasized true opportunities for work-based education.

In addition to raising concerns about a reduction of opportunities for work-based education, they shared valuable insight into past successes, and the forces that brought about policy changes and program practices. They also universally communicated that work-based education is a critical component of secondary education, and advocated for its existence in several forms. Dr. June Atkinson, former State Superintendent, talked about this extensively, even providing specific examples of what the future could hold:

You know, many people would be surprised to know that the training ground for developing teamwork is really the fast food industry. If you think about those jobs, which are mostly held by younger people, it’s all about teamwork. We need to think about moving work-based learning to a model where we can rotate groups of students into work-based learning programs. Instead of one student at a time, we need to consider a model where cohorts of 10 or so can push into the workplace. It could be a few days a week, for a period of time, with assignments and advanced planning—almost like the residency model for doctors. We also have to find a way to get the core teachers to get involved, and get these efforts matched up with their curriculum.

These expert practitioners each offered perspectives and rationales for the value work-based education can offer individual students, and how it can help shape career plans and contribute to positive experiences for students. When thinking about the current voices of today’s students, I see clear congruency to these accounts. Work-based education programs essentially began out of necessity—farming and home-making efforts required practical skill development that best occurred by performing actual tasks

with experienced individuals. These were essentially nothing more than informal apprenticeships. As the workforce evolved and the demand for technical skills increased, work-based education continued, but took on different structures. The internships in which students participate in this study are one such example. The accounts from these students reveal that they generally appreciate and understand the value of these experiences, and also recognize certain aspects that help them grow and develop as productive citizens. Knowing that there is an extensive history of successful work-based education models provides confidence that these efforts are worthwhile. It also provides a context for how the programs of today came to be. The current model of an internship integrates well with the current high school structure. Students experience authentic interactions in the workplace without significant disruption to their daily bell schedules. It also integrates a reflective practice whereby students must record data and provide commentary on their experience, as described by John, a white male student who completed his internship as a tech assistant for the school district:

It [the internship] almost feels like a job. It's not like the normal class where you show up, take notes, take a quiz on Friday, two weeks from now you're going to have a test. It doesn't work like that. It's like a job that you learn so much stuff in. Then you do a project at the end just so you can show what you've learned and what you've done. I don't really see it as a class. I see it as a job that the school lets me have.

In addition to adding an intentionally reflective practice to the experience, students who participate in CTE internships now also have increased choices in what types of work environments they want to explore. In previous historical models, choices were limited to agricultural or homemaking experiences, followed by trade and industry,

health services, and then finally office administration. In today's internship program, there is no limitation to the type of experience a student can choose. This is reflected in the wide variety of placements for the 20 students who participated in this study. When considering the total number of students participating in the program in this district from which the sample participants were chosen, more than 90 different businesses, non-profits, and municipal organizations are represented. The student participation in such a broad spectrum of work-based learning indicates just how diversified the experiences can be. It is also worth mentioning that students who choose specific course pathways of study in high school are not compelled to participate in the internship. While they may be guided or counseled by teachers or family members, the decision to complete an internship is a voluntary act by the student. Where and what type of internship a student chooses may be limited by other factors, including availability of positions in the workplace, and the student's own skills in successfully acquiring a job. Another factor that may contribute to specific placement in a certain type of internship could be related to intrinsic societal biases or prejudices, something that could be addressed in additional research. It is unclear how these variables may impact internship placement.

The past certainly can inform our future, and the history of work-based education provides provided by the expert practitioners offers some valuable clues as to what has worked well, and how those elements might be integrated into current models. The students confirm these positive aspects of the experience through their commentary. Taken together, there are clear implications for how things can be improved moving forward.

WBE and Student Attitudes and Success in High School

Of the 20 students interviewed, 15 did not report any negative attitudes about the internship. In fact, these same 15 students reported overwhelmingly positive comments related to the experience. This is also evidenced by the codes that emerged from the data. Only three of the nine primary codes contained excerpts that reflected negative commentary in any form. Interestingly, this result is aligned with the research conducted by Browder (2007), which conducted research that showed that the high school students taking CTE courses had a more favorable opinion to how their studies related to careers. This is not to say that even these same fifteen students reported an easy, smooth experience all of the time. Many saw it as challenging and sometimes quite difficult, but they also viewed it as an opportunity for personal growth and achievement. Jaden, a Black female, illustrated this point well, when she said:

I know I was really, really worried about doing school and work. I was like, “Okay, I can’t let this affect my grades in my senior year. I can’t slack now,” but it’s gone smoothly. It hasn’t been that bad. It is hard sometimes when you have a lot of homework and you have to go to work and you’ve got to come home and work and you’re tired. It’s taught me to just push through, “Push through this, you can do this, you’re going to get through it, it’s fine.” It’s actually easier than I thought. I thought it was going to be terrible and I was going to want to cry every day, but it’s not. It’s not that bad at all.

Other students who did not necessarily enjoy the work they performed during the internship still saw value in the experience. They understood that it was not necessarily an activity or undertaking that should be fun or entertaining, but rather one that helped them prepare for their future. Harmony, a Multi-racial female, simply stated, “It’s important for me to be able to see the atmosphere of having a real job, and getting credit

for it.” These findings are consistent with the findings related to CTE and student outcomes. Several studies (Plank et al., 2008) indicated a positive correlation between CTE activities and preparation for the workforce.

Some participants in this study commented on how the experience helped them finish high school with a purpose. Jackie, a Black female spoke of her troubles with navigating her coursework in order to graduate. Participating in the internship turned out to be a helpful ‘push’ to see her through, as she explained,

All my teachers and my counselors kept telling me, I could have been graduated. I could have graduated last year. I was like, no, I didn’t want to. This year with the internship, I was like, maybe I can. I’m a senior. I only need one class, that’s English 4.

This type of statement is consistent with existing research. For instance, Kulik (1994) examined many studies of student participation in CTE programs and how it contributed positively to students finishing high school. It seems that the characteristics many students reported about the CTE internship, such as empowerment, real-world learning, relationships and productivity, all contributed to these students’ decisions about high school. The experience itself does not make completing high school less challenging or less rigorous, but it instead contributes to a purpose and meaning behind all of the efforts required. Jesus, a Hispanic male, summed this up nicely when he said,

You’re getting work experience for the life that you have ahead of you after high school. You get more people skills than you would get in high school because in high school you’re just going to talk to friends that you know, not everybody in the whole school. Then at work you get training, you get work training. Something you need in life.

WBE and Students' Postsecondary Plans

The topic of future plans or aspirations did come up frequently in the interviews with the participants. Eleven of the twenty students referenced goals or intentions they had following their high school experience. In some cases, the internship they chose was related to a career interest. John, a White male who worked at the school districts' IT department, aspired to study a related field at a four-year university. Landon, a White male who worked at an auto parts chain store, had clear goals to attend a trade school to become a certified mechanic. Samantha, a White female who worked at a community wellness center as an afterschool counselor, was considering becoming a teacher. The parallels are not accidental as in each case a school counselor or CTE teacher helped advise the student on their choices and also assisted with the application process for employment.

Not every student found their dream job connected to his or her career interests. Some students readily admitted not knowing what they wanted to do. Maria, a Hispanic female claimed her uncertainty when she stated, "It's not like I'm scared. It's more like, 'What am I going to do after graduation?'" Others expressed similar wariness and doubt, but in a few cases, the internship experience helped them rule out future options and focus in on what they might be interested in doing as a career. Consider the comments from Jaden, a Black female,

I know it makes me want to go to college, because I don't want to do this, I don't want to work at Sky Zone for the rest of my life. I know that's really encouraged me, like, "Okay, you really need to go to college because if you don't, this is where you're going to be," that's not where I want to stay, so that definitely . . . I like to be around people a lot, like to socialize and stuff, so definitely want to do

something with people which I already knew that, but this job proved that. I was like, okay, I really like the parties, I like being around the parents and the kids and all that.

In this case, she expressed a desire to do more than work in an entry level service position, yet her experiences at this minimum wage position exposed her to something about the job which she did appreciate and connect with. This indicates that participating in a CTE internship can not only allow students to explore careers they are interested in, but also learn about what activities don't appeal to them.

Race, Ethnicity, and Gender

Oakes (1985) argued that Voc-Ed courses served as a form of tracking which steered minority and low-income students towards low-wage, low-skill post-secondary plans. In her later work, Oakes (2008) acknowledged how changes in CTE curricula and programs have changed the dynamics, but still offered cautionary commentary. For the students in this study, the topics of race and gender were discussed during the interviews and focus groups. However, only four students provided responses or explanations about their feelings on this topic. Two students reported issues related to gender, and both of these students were female. Only two of the twenty had any comments about race, and one of those was a White student complaining about being accused of racism by customers in her workplace. None of the other 18 students reported that race/ethnicity was of any concern to them as it related to the internship experience. These limited findings do not discount assertions made by Oakes and others that participation in this type of educational program may have inadvertent or disproportionate effects on students of color.

However, related to the issue of internship participation, there is one aspect of my research that continues to be difficult to completely reconcile. As discussed in Chapter 5, there were more individual student participants in internships in fast food restaurants who were Black or Hispanic. Also, these same students reported issues with race, ethnicity or gender at a disproportionately higher rate compared to the students who worked in a ‘career’ internship. This occurrence raises questions about social justice and opportunity for minority students and the internship program. This data could be perceived as yet more evidence that minorities continue to be tracked by Career and Technical Education programs, bolstering Oakes (1985, 2008) arguments of inequality and discrimination. However, I instead consider the fact that all students who participate in CTE Internships are better off for having done so when compared to students who do not participate at all. Quite simply, there is value in participating in an internship at a fast food restaurant. As previously mentioned, the negative aspects associated with such a job only really apply to those for whom it becomes a permanent station in life. High school students who take their first job in a fast food restaurant can benefit in many ways. They develop interpersonal skills, build self-confidence, learn to be responsible, and earn money. Also, through interactions with their co-workers, they can see the difficulties associated with working long-term in that position and perhaps be inspired to achieve greater things in life, as was mentioned by two students in this study. Furthermore, it important to mention that none of the five minority students in this study who worked in a fast food restaurant felt that they themselves were limited in their own career plans. In fact, the opposite was true for most all of them (see Table 10).

Table 10

General Commentary from Minority Students Working Fast Food Internships

Name	General Commentary About the Internship Experience
Jamal	I like the idea [of the internship] I think it's something new and it will work out and it could progress into something. I think it could grow
Jackie	It [internship] was fun. It was just some days. I never had a problem with my work and school. I always had that down pat.
Maria	Well, in my opinion, I think the working environment is actually really good for students because that way, they learn how our parents actually work for our money, and then that it's not that easy and they also learn a lot from work.
Cheyenne	You don't realize certain things about your job until you sit down and think about it. [the internship] also helps further you in life. I think it's important.
Harmony	It's important for me to be able to see the atmosphere of having a real job, and getting credit for it.

So, for the participants in this study, I neither find there to be any significant concerns or limitations related to their race, ethnicity or gender, nor related to the industry in which the internship occurs. Based on this small study, it is difficult to make any assertions that recent changes in CTE programs have ameliorated outcomes for minority or disadvantaged high school students. As described by the expert practitioners interviewed for this research, this is neither a new phenomenon, nor will it likely be resolved easily. It still may be true that there are serious programmatic deficiencies that cause problems related to social justice and equitable opportunity for all students in CTE and work-based learning. Additional research is needed to answer these questions.

Parallels to these same tensions and arguments can be made as far back as the intellectual debate between Booker T. Washington and W. E. B. Du Bois. These two influential figures in the first few decades of the 20th century of American history debated similar issues related to social justice and educational models. Speaking in the early 20th century, Washington expressed a view of Black advancement that saw value in educating the masses in skilled trades, which could elevate the lives of ordinary citizens:

Our greatest danger is that in the leap from slavery to freedom we may overlook the fact that the masses of us are to live by the production of our own hands, and fail to keep in mind that we shall prosper in proportion as we learn to dignify and glorify common labor, and put brains and skill into common occupations of life; shall prosper in proportion as we learn to draw the line between the superficial and the substantial, the ornamental gewgaws of life and the useful. No race can prosper till [sic] it learns that there is as much dignity in tilling a field as in writing a poem. It is at the bottom of life that we must begin and not at the top. (as cited in Moody, 1980, p. 32)

Du Bois was critical of these views, and believed that this path would only lead to perpetuating racism and inequality. He instead focused on the intellectual advancement of African Americans, which would help them be more competitive at professional and highly advanced careers. He argued that the “talented tenth,” or intellectually elite portion of the Black population, if well educated, could rise above and challenge the oppressive White elite class and bring about social justice (Gordon, 2014). While this debate still remains unresolved, it is true that people of color are still underachieving in schools and under-earning in the workforce compared to their White counterparts. In response, is it better to narrowly interpret Washington’s ideas and create career and technical pathways for all students that track them into specific roles in our society? Or

do we instead focus on promoting the academic and intellectual skills to give every student the opportunity for a balanced liberal arts education? Perhaps it is better to consider not which of these educational paths we follow, but rather what parts of each are considered best in our youth for equitable opportunities in life. Certainly, there is room to include opportunities for students to participate in CTE studies and work-based education activities without sacrificing core academic pursuits, for each of these is made stronger with the other as a complementary endeavor.

Revisiting the Conceptual Framework

In Chapter II, I presented a conceptual framework to help guide the work for my research. I created a diagram to help visualize the different components, including specific inputs and outputs related to student participating in work-based learning (see Figure 5). Because of the variability involved in these experiences, I needed to identify some commonalities that I could focus on in this study. My previous research of the topic led me to understand the importance of establishing some core components of the experience (Rojewski, 2002). Some of the specific inputs and outputs were also informed by other research in this field, as noted by the themes identified in Chapter II.

As it turns out, the basic inputs and outputs of the conceptual framework were appropriately identified. The research questions that I created were successful in gathering data about student self-perceptions, aspirations, and attitudes related to high school, future plans and the internship experience. They also established a way to explore aspects of the students' identities related to gender, race, ethnicity and prior experiences. Additionally, these same topics were explored in the interviews with the

expert practitioners. Once all the data were collected, I was able to rely on the some of these same elements for the coding system.

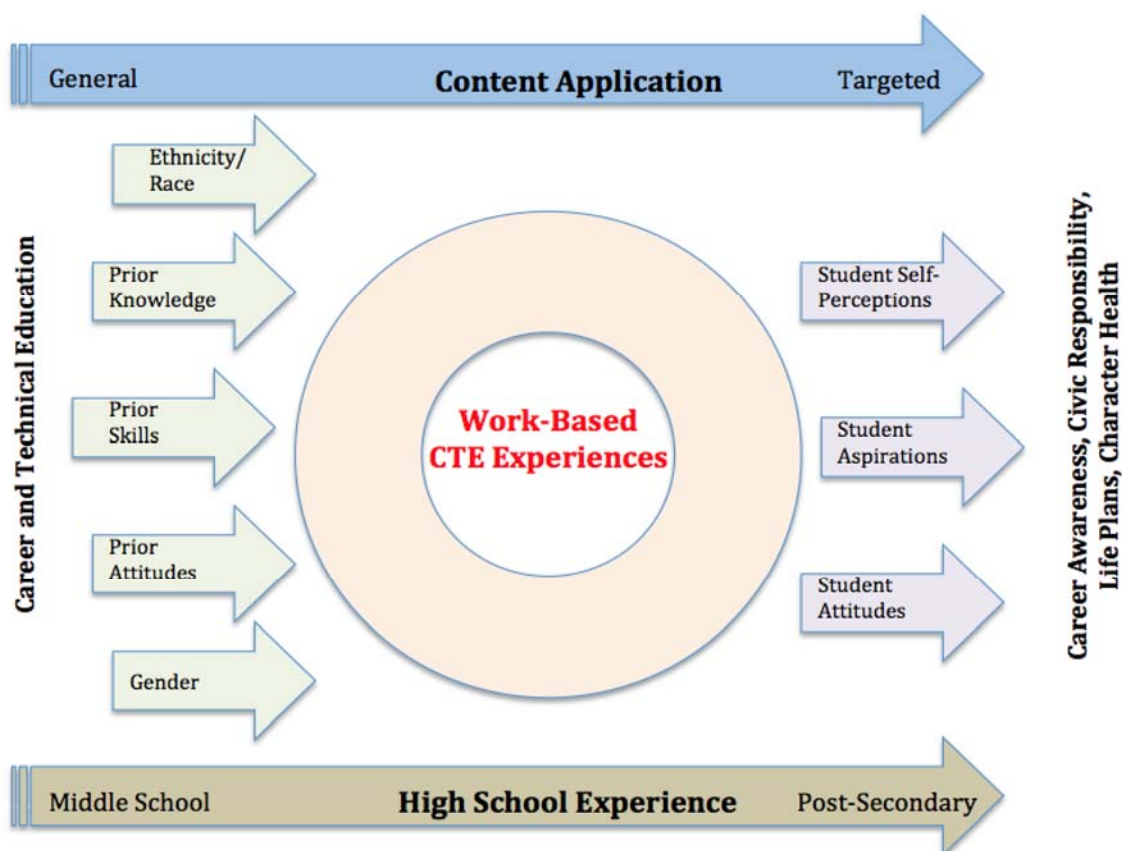


Figure 5. Conceptual Framework Revisited.

Consider for example Tyler, a white female who completed her internship at a fast food restaurant. She ranks in the top five of her class at her high school, is an active member of the national junior honor society, participates in multiple clubs and athletic teams, and pursues hobbies during her free time. She is a very driven, industrious person, and very self-aware, describing herself in this way:

High school has always been a great thing for me, because I've always been the top of my class, always. I've taken great pride in school. Nothing in my life comes before school, because I want to go on and get my doctorates degree, so I know I need to work really, really hard. It's just throughout high school, I worked the best to be the best that I can be. That's just how it's always been, just work, work, work. 24/7, until 3:00 in the morning.

Basically, Tyler does a very nice job describing the inputs of the conceptual model, describing the elements listed in the diagram's green arrows, which she carries into her internship experience. The outputs for Tyler were revealed through the interview process, where she discusses the influence of the experience and how it allowed her to develop new skills. She describes one particular instance in this excerpt:

We had new people coming in constantly, because they hire so many new people. There's always six or seven, when I come in every week, I'm like, "Where'd you guys come from?" I always have to teach them, "This is how you clean this," or, "This is how you're supposed to do this," or, "Maybe you need to be a little bit nicer with the customer. Try saying this instead." I'm always doing that, and I'm always preparing things, like at nighttime, I'm shutting things down and I'm teaching people how to do that. It's just taught me how to teach people and be a leader the way I need to be when I need to teach, to be able to stand up and say what I think is right, and stand up to teach these people what they need to be able to do.

The data from the student participants in this study can be examined through this framework, as it provides consistent and comparable analysis that can then inform the program itself.

Future research in this area could consider adaptations to this conceptual framework. At the core of the diagram there could be clarification as to the types and durations of work-based learning. These are variables that I did not explore in my research, as I only focused on the specific model of CTE internships. Another alternative

model could also include changing the inputs and outputs of the model, including information about how participation and job placement occur, specifically as it relates to gender, race, and ethnicity. There are many ways in which this same framework could be adjusted to help shape future research in this area.

Implications

The findings from this study indicate several important structures that need to be considered when placing students in this program:

1. Student participation must be voluntary. The CTE Internship should remain an elective offering to students and not tied to any requirements for the completion of high school. It should also not be used as a requirement to incentivize or exclude participation in any academic tracks or pathways of studies.
2. Faculty advisors should carefully consider appropriate student placement, and regularly monitor students while they participate in the program. Faculty members should be particularly aware of students' vulnerabilities related to race and gender in the work-place setting.
3. Program administrators should carefully monitor all aspects of the program, specifically the supervisory roles of faculty and work placement, in order to maintain program integrity and to promote positive outcomes.

Below, I discuss each of these implications in greater detail.

Student Participation

The State of North Carolina currently does not have a requirement for the mandatory participation of work-based education while in high school. There are neither general statutes nor State Board of Education policies that require such participation by regular education students. In 2011, the North Carolina State Board of Education implemented policy to promote graduation projects. At this same time, there was discussion to require a statewide graduation project, which included work-based education models as a possibility to satisfy that requirement. However, this requirement was never established and is now a local option for school districts (NCDPI, 2015).

There is a separate work-based learning requirement for a specific population of public school students. According to the North Carolina Department of Public Instruction, secondary students who are classified through their Individualized Educational Plan (IEP) as being a part of the Occupational Course of Study are required to complete “300 hours of school-based training, 240 hours of community-based training, and 360 hours of paid employment” (Public Schools of North Carolina, n.d., p. 3). However, these students neither graduate with a standard diploma, nor are they able to matriculate into mainstream college or university degree programs with this classification.

Currently, there exists no state statutory or State Board policies that require all students to participate in work-based learning experiences. This experience should remain as an elective option for students. Students who self-select to participate in an internship are already demonstrating readiness to participate in a program that requires

considerable self-direction and self-motivation. As evidenced by the comments of the participants, the internship can be a demanding activity that places additional demands on a student's schedule and workload. There can be considerable benefits and rewards for those who manage it well, however it should not be considered as a mandatory component of the high school experience. If this were the case, there are many students who would not be prepared to take on the added responsibility and challenges it presents. Additionally, any mandatory participation would present significant logistical problems. Currently, students must provide their own transportation to participate in the internship program. Also, the availability of internship positions in the workplace is not a fixed constant. Each position is sought out on an individual basis; an internship would not necessarily exist for every high school student.

Maintaining the program as an option for those students who are willing and able to participate is the most sustainable and effective model. However, as referenced by some of the participants, the school district could improve communication and marketing of the program in order to make everyone who is interested aware that is in fact a viable option.

Monitoring of Students

Students enrolled in regular courses in the high school setting are monitored and supervised in a systematic and structured way. The typical student code of conduct for a public high school restricts the movement and activity of students to environments that are constantly supervised and monitored by adults. Students who are enrolled in a CTE Internship program usually encounter a much greater degree of personal freedom.

Although a few participating students do engage in their internship at a school site, students typically leave the school environment in order to perform their job duties. Many students drive themselves or carpool with other students when traveling to and from their work site. Once arriving at their job site, they are each entrusted to a site supervisor as specified in their formal internship agreement, however they may not necessarily be in the presence of that supervisor at all times. For example, Angela, a study participant, works at a local community-based organization and supervises young children herself, yet she seldom sees her supervisor except at the beginning and ending of her shift, with the occasional interval in between. These students are expected to not only have more personal freedom, but also take on more personal responsibility.

Jamal, who leaves school each day after his third period class to go to his internship, expressed one benefit he saw in the internship arrangement:

Having more flexibility in your schedule and basically being able to have freedom and leave when you choose. Being able to schedule your own work and not have to sit in a class and have someone give you deadlines, stuff like that.

Landon, another student, leaves school about the same time as Jamal, described how the change in his daily schedule made him feel about things:

The internship, well, it gives you more freedom. You can go out, and you can work, but you got to have the mentality and the things that do right when you get that freedom. During the class, you got a teacher standing right there over your shoulder. Internship, you don't. You get to go out, and you get to actual have fun while you work.

Consequently, while the students reported positive sentiments about having the freedom of movement and autonomy not usually allowed in a traditional high school day,

such freedom does present a challenge for educators. Maintaining the safety and well-being of adolescents is a critical task which requires focus and sustained effort.

There are also issues related to increases in the responsibility for these students. Mistakes made in the workplace can have consequences much more serious than a poor mark on a test or quiz. Angela, who works at the community-based organization, is responsible for supervising young children in the afterschool program. She described one instance where a child was hurt as well as the challenge that entailed in making sure there was no serious injury and her relief that the parents were satisfied with their child's care. For students working for businesses that provide services, it is not unusual for them to handle and be responsible for hundreds of dollars during a typical work session. They may also be responsible for preparing or serving food that must meet specific safety guidelines and protocols. Consequences for errors in handling money can be grounds for immediate dismissal. Improper procedures in preparing or handling food can have even more serious ramifications.

So, while these students typically celebrate the newfound freedom and autonomy found in an internship, there are potential concerns that can arise when there is a lapse of supervision or oversight. In the interviews, some students expressed how sometimes their interactions with customers, patrons or coworkers at their work-sites can bring conflict, frustration and significant stress. Jackie, who works at a fast food restaurant, described how the stress can be overwhelming at times, and how she copes with things:

I think it's a lot. It just depends on the person, how much they can take. If you're not that strong minded, then it's going to be hard. You know how you have days where customers just be rude, and you just can't take it. You have to learn to

leave your problems at home. When you come in to work, you've got to be a . . . You've got to empty your mind. Some people can't do that.

The most typical negative interaction seemed to occur with dissatisfied customers or adults who demonstrated disrespect and anger toward the student interns. Jobs in the service sector increase the likelihood of encounters with disgruntled or irate customers, simply because there is frequent interaction with so many on an ongoing basis. One intern, named Vonya, who I observed at her fast food restaurant, stated that it was not uncommon for her to take orders from a customer every three to five minutes, which during a six-hour shift could mean interaction with over one hundred individuals. "On a busy evening I might take an order every two to three minutes. It gets crazy fast and people get impatient and upset a lot."

As previously mentioned, on few occasions the issues of race have arisen in these interactions with customers. There is a difference in the way these students cope with conflict caused by issues of customer dissatisfaction and accusations of racism or discrimination. Tyler went on to say, "If I mess up an order then I will own that. I mean, that's on me. But I don't want no haters yelling at me because I'm White or whatever. They don't even know me."

Prior to being enrolled in a CTE internship, it would be advisable to advise and counsel students about the expectations for the experiences in which they will engage. Administrators need to be more sensitive and cognizant to this issue, perhaps with some pre-training or protocols to use when problems arise. Specific triggers or mechanisms should be put in place to identify issues, provide support, and monitor progress. The

freedom given to students does not absolve the school's responsibility to carefully monitor the safety and well-being of the students any less than if they were still in the school building.

Program Administration

Program administrators should carefully monitor all aspects of the program, specifically the supervisory roles of faculty and work placement, in order to maintain program integrity and to promote positive outcomes. Because of the nature of the internship, it is difficult for school personnel to effectively administer the program. By definition, the student activity takes place away from the school building, and away from school personnel. A certain degree of trust occurs in assuming that the student will fulfill the responsibilities associated with the internship.

In order to help administer the program properly, it is important that a clear process and set of procedures are developed. In this district, there were three separate sets of documents and processes that needed to be followed: 1) student and parent forms; 2) internship coordinator (school personnel) forms; and, 3) work supervisor or work site forms.

All three sets of documents were to be completed at different stages of the experience. The first step in a successful internship is to match an interested student with an employer. The school district should create a standard cover letter clearly explaining the expectations of the program. Attached with this letter are the guidelines of the internship including the minimum time requirements of the student (e.g., 135 hours). Also included in the packet are a mid-term and final evaluation review forms. These

documents list the criteria for success in a general rubric form, and an area for the work supervisor to provide written remarks about job performance.

At the same time, parents and students are also made aware of all of the standards that they need to address in order to be successful with the internship. Students are given a cover letter explaining the purpose of the internship, along with a packet of additional information. This includes a student contract, signed by both the student and parent, liability release and travel permission, statement of confidentiality, timesheets, and the rubrics for grading. Additionally, for those students seeking honors weight, there are templates for the portfolio and presentation guidelines.

The third component of administering this program is the faculty coordinator. This school-based person creates a weekly check-in schedule to speak with students while they are on campus. The purpose of this brief visit is to ensure regular communication in case any issues or problems arise. Additionally, each faculty advisor should schedule at least two site visits during the semester. One of these is usually announced, and the other unannounced. This helps corroborate work schedules and allows the faculty advisor to see the student in their work environment. It also allows for an opportunity for the faculty advisor to meet with the workplace supervisor to discuss any issues related to job performance. While I did not observe any issues related to this, it should be considered as a potential issue with some students who may not be successful in the internship. Documents and forms which help support this monitoring process are included in Appendix D to help support practitioners who consider implementing these activities.

Failing to monitor and administer the internship program or any work-based learning can result in negative outcomes. Student safety and issues of liability are significant, especially for preventable instances of negligence or misconduct. School districts must secure proper insurance coverage that matches the risk associated with these programs. Also, care must be taken to adhere to any Department of Labor regulations. There are some new restrictions on how these are conducted, as well as certain types of work for students of certain ages that must be followed (Loretto, 2016).

Aside from the serious issues related to safety and legal matters, failure to properly administer an internship could result in unethical educational practices. In this study, I encountered one student who claimed that she knew of an instance where the internship was not properly administered. Cheyenne reported that some students didn't think the internship was a credible experience. "They just think that this is a class where I either have a freebie or I can just get more money that way. It's not really the case for me." Cheyenne went on to explain that while her experience was legitimate, she didn't think that this was always the case. When pressed further, she explained, "It's nothing. I know a couple [of internship students] that don't really have a job. Really, it's just a free period and they still get credit for it."

Clearly concerned about this potentially serious issue, I asked her if she knew of any names, but she could not remember. I followed up by reporting this concern to the site faculty advisor who said she would investigate. She later reported back that every student participating had verified employment through the signed forms and site visits. However, it clearly demonstrated how a student could take advantage of the situation if

the program was not being closely monitored. This was also an instance where I was reminded of my subjectivity and positionality with this study. It had not been my intent to use information gathered in this study to conduct quality control measures with the program for which I was ultimately responsible.

Directions for Future Research

Future research in the area of work-based education should be expanded. In my review of the related research, there were very few studies that focused specifically on this topic, or that addressed the research questions that I posed. As secondary education continues to evolve, it is likely that we will see more innovative programs and practices that blur the lines between high school, post-secondary education and the workplace. Criticism abounds with the current high school model that remains fundamentally unchanged in the past forty years. If new, visionary practices are to be brought to bear to the high school model, practitioners will need additional research to help guide their decision-making, and policy makers will need data to support the allocation of resources.

Additional research should also examine how CTE and work-based education are intertwined with ethnicity and gender. Oakes (1985, 2008) makes strong arguments for how inequitable practices can become embedded in our educational programs. Similarly, my small, localized study itself raises questions about how and why students self-select to participate in work-based learning activities. For instance, why do Black females in this study choose to work in the fast food industry for their internships at a higher rate than their White peers? Are they guided there by the unscripted and informal expectations of the adults that surround them? Why do predominantly White males in this study steer

themselves toward the career-oriented internships at a higher rate than their minority peers? These unanswered questions related to race and gender should be examined in different contexts and at different scales by other researchers.

Significance of the Study

Conclusions and implications from this study will contribute to the body of knowledge for CTE and work-based learning at the secondary level. It may serve to inform teachers, guidance counselors, district leaders and policy-makers about how we may best prepare our students for careers, and assist them with creating plans for their futures. Because this study relies entirely on students and expert practitioners for information, it provides a unique perspective on the impact this type of education can have. While there are many aspects that determine any program's measure of efficacy, the feelings, perceptions and understandings of the beneficiaries involved are critically important. How students perceive the educational activities in which they participate has a bearing on their outcomes, and is therefore worthy of consideration by anyone with a vested interest in the education of our children.

I believe this study can have a positive contribution to this area of research. First, given that this is a relatively under-researched topic, (cite) it contributes by helping fill a void. Second, it also opens the door to questions which could be explored in other research projects. These could include the partially unresolved issues of gender, ethnicity, and race. Do CTE programs like these internships still contribute to socially unjust practices in our schools, or do they provide opportunities for all students that would not otherwise exist? Lastly, what types of other work-based educational models

could be examined? Are there models to explore with younger students in middle school? Or perhaps a more extended and targeted apprenticeship model, which bridges toward permanent employment? All pertinent questions when considering how this study fits among those discussed in Chapter 2.

Conclusion

Public education is currently facing considerable pressure to provide more successful outcomes for our students. Criticisms abound for the ways that current programs are structured, and alternative models are being promoted in the form of charter schools and voucher programs for private schools. This indicates that public schools would do well to consider reforming and restructuring programs so they are more successful in preparing students for careers and postsecondary education. Workforce development begins with K-12 education, and the expert practitioners interviewed in this study provided a broad overview of how CTE and work-based education has succeeded in these efforts. Additionally, the current students in this study who participate in CTE internships generally also perceived the experiences to add value and improve their preparation for the future. Incorporating programs such as the CTE internship into secondary education models could be a way to improve outcomes for students.

That being said, no single effort or program will serve every student nor fully prepare them for life beyond high school. It is also true that specific populations of students might be more vulnerable and require additional support and consideration. As discussed throughout this study, CTE programs in the past have been specifically criticized for contributing to tracking minority students into lower-skill, lower wage

career pathways. The purpose of this research is neither to test this assertion, nor do I attempt to diminish the arguments posed by Oakes and others. Instead, I would simply present the findings of this study as demonstrating benefit to those whom participated in the CTE internships. Quite simply, these students appear to be better off for having participated, and alternatively would have been at a disadvantage for not ever having the chance to do so.

It is my hope that we can continue to redesign public education models at the secondary level by adding increased opportunities for students to learn outside of the classroom, drawing on the experiences and expertise of those in various sectors of the workforce. I believe that students need more opportunity to apply the academic knowledge acquired in the classroom in authentic workplace settings. Educators need to investigate ways to determine how student aptitudes, interests and talents can be directed to specific work-related activities. Introducing high school students to different fields of work in this way not only allows them to consider and develop future plans, but it also builds soft skills and allows them to mature professionally for the workforce. Former State Superintendent, Dr. June Atkinson, summed it up perfectly when she stated, “Work is a great experience for our students, but connecting school to work is a life-changing experience.”

REFERENCES

- Adelman, C. (2006). *The toolbox revisited: Paths to degree completion from high school through college*. Washington, DC: U.S. Department of Education. Retrieved from <https://www2.ed.gov/rschstat/research/pubs/toolboxrevisit/toolbox.pdf>
- Advance CTE. (2016). *North Carolina: Advance CTE*. Silver Spring, MD: Author. Retrieved from <https://careertech.org/north-carolina>
- Alfeld, C., Charner, I., Johnson, L., & Watts, E. (2013). *Work-based learning opportunities for high school students*. Louisville, KY: National Research Center for Career and Technical Education.
- Apprenticeship2000. (2016). *Apprenticeship 2000*. Retrieved from <http://www.apprenticeship2000.com/zwp/>
- Arnold, C. L., & Levesque, K. A. (1992). *Black Americans and vocational education: Participation in the 1980s*. Berkeley, CA: National Center for Research in Vocational Education. Retrieved from <http://files.eric.ed.gov/fulltext/ED352554.pdf>
- Association for Career and Technical Education. (2015). *State policies impacting CTE: 2014 year in review*. Retrieved from https://www.acteonline.org/uploadedFiles/Resources/Publications/2014_State_Policy_Review_FINAL.pdf
- Association for Career and Technical Education. (2017). *Policy and advocacy: CTE funding*. Retrieved from <https://www.acteonline.org/funding/#.VzX5CBUrJE5>

- Association for Career and Technical Education. (n.d.). *Carl D. Perkins Career and Technical Education Act*. Retrieved from <https://www.acteonline.org/search.aspx?q=carl%20d%20perkins%20act>
- Billett, S. (2005). Learning about the world of work: Co-opting school students' paid work experiences. *The Australian Educational Researcher*, 32(1), 49–66.
- Bozick, R., & Dalton, B. (2013). Balancing career and technical education with academic coursework: The consequences for mathematics achievement in high school. *Educational Evaluation and Policy Analysis*, 35(2), 123–138. Retrieved from <http://epa.sagepub.com/content/35/2/123.short>
- Browder, A. (2007, January 1). *Students' views of career and [sic] technical education: A qualitative study* (Unpublished master's thesis, The University of Missouri-Columbia). Retrieved from <https://mospace.umsystem.edu/xmlui/bitstream/handle/10355/4985/research.pdf?sequence=3&isAllowed=y>
- Brown, T. H. (2006). Beyond constructivism: Navigationism in the knowledge era. *On the Horizon*, 14(3), 108–120.
- Carnevale, A. P., Jayasundara, T., & Hanson, A. R. (2012). *Career and technical education: Five ways that pay along the way to the BA*. Washington, DC: Center on Education and the Workforce. Retrieved from <https://cew.georgetown.edu/wp-content/uploads/2014/11/CTE.FiveWays.ExecutiveSummary.pdf>
- Castellano, M., Stringfield, S., & Stone, J. R. (2003). Secondary career and technical education and comprehensive school reform: Implications for research and practice. *Review of Educational Research*, 73(2), 231–272.

- Doolittle, P. E., & Camp, W. G. (1999). Constructivism: The career and technical education perspective. *Journal of Vocational and Technical Education*, 16(1), 23–46. Retrieved from <http://files.eric.ed.gov/fulltext/EJ598590.pdf>
- Fletcher Jr., E., & Zirkle, C. (2009). The relationship of high school curriculum tracks to degree attainment and occupational earnings. *Career and Technical Education Research*, 34(2), 81–102.
- Fontana, A., & Frey, J. (1994). The art of science. In N. K. Denzin & Y. S. Lincoln (Eds.), *The handbook of qualitative research* (pp. 361–376). Thousand Oaks, CA: Sage. Retrieved from <http://jan.ucc.nau.edu/~pms/cj355/readings/fontana%26frey.pdf>
- Gamoran, A., & Mare, R. D. (1989). Secondary school tracking and educational inequality: Compensation, reinforcement, or neutrality? *American Journal of Sociology*, 94(5), 1146–1183. <http://www.jstor.org/stable/2780469>
- Gentry, M., Peters, S. J., & Mann, R. L. (2007). Differences between general and talented students' perceptions of their career and technical education experiences compared to their traditional high school experiences. *Journal of Advanced Academics*, 18(3), 372–401.
- Gordon, H. R. (2014). *The history and growth of career and technical education in America* (4th ed.). Long Grove, IL: Waveland Press.
- Griffith, J. (2001). An approach to evaluating school-to-work initiatives: post-secondary activities of high school graduates of work-based learning. *Journal of Vocational Education & Training*, 53(1), 37–60.

- Hamilton, P. (2014). *Knowledge and social structure: An introduction to the classical argument in the sociology of knowledge*. New York, NY: Routledge.
- Hoffman, N. (2011). *Schooling in the workplace: how six of the world's best vocational education systems prepare young people for jobs and life*. Cambridge, MA: Harvard Education Press.
- Hofman, R. H., de Boom, J., Meeuwisse, M., & Hofman, W. A. (2013). Educational innovation, quality, and effects an exploration of innovations and their effects in secondary education. *Educational Policy*, 27(6), 843–866.
- Hummel, R. (2012). *A survey of vocational administrators and teachers in career and technical education centers regarding their perception of vocational program improvements*. Retrieved from http://eric.ed.gov/?q=Career_and_Technical_Education&id=ED541535
- Jensen, J. L., McDaniel, M. A., Woodard, S. M., & Kummer, T. A. (2014). Teaching to the test . . . or testing to teach: Exams requiring higher order thinking skills encourage greater conceptual understanding. *Educational Psychology Review*, 26(2), 307–329.
- Jong, S., Jan, A., Wierstra, R. F., & Hermanussen, J. (2006). An exploration of the relationship between academic and experiential learning approaches in vocational education. *British Journal of Educational Psychology*, 76(1), 155–169.
- Kraebber, S. L. (2007). The relationship between self-concept and self-ratings of generalizable skills of students in postsecondary career and technical programs (Doctoral dissertation, Purdue University).

- Kulik, J. A. (1994). Curricular tracks and high school vocational education. In A. Gamoran (Ed.), *The quality of vocational education background papers from the 1994 National Assessment of Vocational Education* (pp. 165–132). Washington, DC: National Assessment of Vocational Education.
- Kvale, S., & Brinkmann, S. (2009). *InterViews: Learning the craft of qualitative research interviewing* (2nd ed.). Los Angeles, CA: Sage.
- Lambeth, J., Joerger, R., & Elliot, J. (2009). Implications for focusing research in career and technical education and workforce development. *Career and Technical Education Research*, 34(3), 137–153.
- Lester, S. (1999). *An introduction to phenomenological research*. Taunton, UK: Stan Lester Developments. Retrieved from <https://www.rgs.org/NR/rdonlyres/F50603E0-41AF-4B15-9C84-BA7E4DE8CB4F/0/Seaweedphenomenologyresearch.pdf>
- Lewis, T., & Cheng, S. Y. (2006). Tracking, expectations, and the transformation of vocational education. *American Journal of Education*, 113(1), 67–99.
- Lichtman, M. (2012). *Qualitative research in education: A user's guide* (3rd ed.). Thousand Oaks, CA: Sage.
- Lilly, J. P. (2007). *Agricultural history of North Carolina*. NCDA&CS Agricultural Statistics Division.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.

- Loretto, P. (2016). *New Department of Labor guidelines on internships*. Retrieved from <https://www.thebalance.com/new-department-of-labor-guidelines-on-internships-1986582>
- Lynch, R. L. (2000). *New directions for high school career and technical education in the 21st century*. Information Series No. 384. Columbus, OH: Ohio State University.
- McLoyd, V. C., Kaplan, R., Purtell, K. M., & Huston, A. C. (2011). Assessing the effects of a work-based antipoverty program for parents on youth's future orientation and employment experiences. *Child Development*, 82(1), 113–132.
- Meeder, H. (2008). *The Perkins Act of 2006: Connecting career and technical education with the college and career readiness agenda*. Achieve Policy Brief. Washington, DC: Achieve, Inc.
- Moody, F. (1980). The history of blacks in vocational education. *VocEd*, 55(1), 30–34.
- National Assessment of Career and Technical Education. (2013). *Interim Report*. Retrieved from <https://www2.ed.gov/rschstat/eval/sectech/nacte/career-technical-education/interim-report.pdf>
- North Carolina Department of Public Instruction. (n.d.a). *Career and Technical Education: Curriculum*. Retrieved from <http://www.dpi.state.nc.us/cte/program-areas/>
- North Carolina Department of Public Instruction. (n.d.b). *Career and Technical Education: Program areas*. Retrieved from <http://www.dpi.state.nc.us/cte/program-areas/>

North Carolina Department of Public Instruction. (n.d.c). *CTE Planning & Performance Management System 2016–2017*. Retrieved from <http://ctelps.dpi.state.nc.us/ctelps1617Plan.nsf>

North Carolina Department of Public Instruction. (n.d.d). *CTE Planning & Performance Management System 2017–2018*. Retrieved from <http://ctelps.dpi.state.nc.us/>

North Carolina Department of Public Instruction. (2014). *North Carolina Career and Technical education standards*. Retrieved from <http://www.ncpublicschools.org/cte/curriculum/essential-standards.pdf>

North Carolina Department of Public Instruction. (2015). *The North Carolina Graduation Project*. Retrieved from <http://www.ncpublicschools.org/docs/accountability/testing/eoc/gradproject15.pdf>

Oakes, J. (1985). *Keeping track: How schools structure inequality*. New Haven, CT: Yale University Press.

Oakes, J. (2008). Keeping track: Structuring equality and inequality in an era of accountability. *The Teachers College Record*, 110(3), 700–712.

Packard, B., Leach, M., Ruiz, Y., Nelson, C., & Dicocco, H. (2012). School-to-work transition of career and technical education graduates. *The Career Development Quarterly*, 134–144. Retrieved from http://eric.ed.gov/?q=Career_and_Technical_Education&id=EJ968333

Patton, W. (2005). A postmodern approach to career education: What does it look like? *Perspectives in Education*, 23(1), 21–28.

- Phillips, D. C. (1995). The good, the bad, and the ugly: The many faces of constructivism. *Educational Researcher*, 24(7), 5–12.
<http://www.jstor.org/stable/1177059>
- Plank, S., Deluca, S., & Estacion, A. (2008). High school dropout and the role of career and technical education: A survival analysis of surviving high school. *Sociology of Education*, 81, 345–370. Retrieved from <http://krieger.jhu.edu/sociology/wp-content/uploads/sites/28/2012/02/SOE-2008.pdf>
- Ponder, J., Veldt, M. V., & Lewis-Ferrell, G. (2011). Citizenship, curriculum, and critical thinking beyond the four walls of the classroom: Linking the academic content with service-learning. *Teacher Education Quarterly*, 38(4), 45–68.
- Portelli, A. (2009). What makes oral history different. In L. D. Giudice (Ed.), *Oral history, oral culture, and Italian Americans* (pp. 21–30). Palgrave Macmillan.
- Public Schools of North Carolina. (n.d.). *Future-ready core course and credit requirements checklist*. Raleigh, NC: Author. Retrieved from <http://www.ncpublicschools.org/docs/gradrequirements/resources/gradchecklists.pdf>
- Richard, E., Walter, R., & Yoder, E. (2013). The effect of capstone cooperative education experiences, and related factors, on career and technical education secondary student summative assessment scores. *Career and Technical Education Research*, 38(1), 19–37. Retrieved from http://eric.ed.gov/?q=Career_and_Technical_Education&id=EJ1033602

- Rehm, M. L. (2008). Career and technical education teachers' perceptions of culturally diverse classes: Rewards, difficulties, and useful teaching strategies. *Career and Technical Education Research*, 33(1), 45–64. Retrieved from <http://acter.metapress.com/content/g1684nv35r8161v2/>
- Rojewski, J. (2002). Preparing the workforce of tomorrow: A conceptual framework for career and technical education. *Journal of Vocational Education Research*, 27(1), 7–34.
- Rosenbaum, J. E. (1976). *Making inequality: The hidden curriculum of high school tracking*. Chicago, IL: John Wiley & Sons.
- Ryan, P. (1991). *International comparisons of vocational education and training for intermediate skills*. Psychology Press.
- Savery, J. R., & Duffy, T. M. (1995). Problem based learning: An instructional model and its constructivist framework. *Educational technology*, 35(5), 31–38.
- Schwandt, T. A. (1994). Constructivist, interpretivist approaches to human inquiry. In N. K. Denzin & Y. S. Lincoln (Eds.), *The landscape of qualitative research: Theories and issues* (pp. 221–259). Thousand Oaks, CA: Sage.
- Snape, D., & Spencer, L. (2003). The foundations of qualitative research. In J. Richie & J. Lewis (Eds.), *Qualitative research practice: A guide for social science students & researchers* (pp. 1–23). Thousand Oaks, CA: Sage.
- Thomson, A. (1998). Fifty years on: An international perspective on oral history. *The Journal of American History*, 85(2), 581–595.

- Trends in Career and Technical Education Research. (2008). *Journal of Career and Technical Education*, 24(2), 57–68. Retrieved from <http://eric.ed.gov/?id=EJ860502>
- U.S. Department of Labor. (n.d.). *Gender facts over time*. Retrieved from https://www.dol.gov/wb/stats/facts_over_time.htm
- Walsham, G. (1995). The emergence of interpretivism in IS research. *Information Systems Research*, 6(4), 376–394.
- Winborne, S. (2015). *An oral history of work-based education in North Carolina*.

APPENDIX A
SEMI-STRUCTURED INTERVIEW PROTOCOL

Semi-Structured Interview Protocol

1. *Tell me about your experiences in high school.*
2. *What types of classes or experiences have made a difference in the way you think about your future plans?*
3. *Why did you choose to take CTE courses?*
4. *What did you think about the CTE internships [work-based experience] you participated (are participating) in?*
5. *How was(is) the CTE internship different compared to your other classes? What was better or worse about the two experiences?*
6. *How did you find out about the internship opportunity?*
7. *What do your classmates think about the internship?*
8. *Tell me about any conversations you have had with adults about participating in the internship? Parents/family? Coworkers? Teachers?*
9. *What kind of benefits do you see in participating in the internship?*
10. *Describe any drawbacks or regrets in participating in the internship?*
11. *How has this internship influenced your future plans after high school?*
12. *How do you think your gender affects the choices or opportunities you have with this internship?*
13. *How do you think your ethnicity affects the choices or opportunities you have with about this internship?*

14. Is there anything else you would like to tell me about your high school experiences or in participating in the internship?

APPENDIX B

FOCUS GROUP OUTLINE

Focus Group Outline

1. Introduction:

Welcome, set the group at ease, introduce myself, and explain the following:

It's great to see everyone again. Thanks so much for taking the time to come back and speak with me again about the internship program.

Who we are and what we're trying to do:

I have met with everyone here already individually. I have decided to bring us together in a small group setting to explore some more ideas that you have about the student internship program.

What will be done with this information:

Just like with the individual meeting, I will record our conversation today so I can go back and listen to it later. This way, I won't forget anything that was said. Remember that everything we say in here is confidential, and I won't share any information with anyone using your real name. Everything will be anonymous.

2. Explanation of the process

So basically we are just going to have a conversation. I might make some comments, or ask some question to help get the discussion going forward. Anyone can feel free to speak up at any time. There are no right or wrong things to say, or things we have to agree on. I just want to know what your true ideas and opinions are.

3. Logistics

So the meeting today will only last about 45 minutes to an hour long. Feel free to move around or go to the bathroom. I've brought some water and some snacks if you want some, so help yourself.

4. Ground Rules

I do think we should have some ground rules. Can you think of some that are important for our group?

After they brainstorm some, I will make sure the following are also on the list.

- *Everyone should participate.*
- *Information provided in the focus group will be kept confidential*
- *Stay with the group and please don't have side conversations*
- *Turn off (put away) cell phones*
- *Have fun!*

5. Turn on Tape Recorder

6. Ask the group if there are any questions before we get started, and address those questions.

7. Introductions

Okay, so we are going around table and take turns introducing ourselves. Tell everyone your name and something about themselves. I will go first.

8. Questions:

- *Great. Let's start the discussion by talking about the internship program.*
- *What are some things that someone can tell me about their experience?*

- *What are some of the positive things about the experience?*
- *What are some of the negative things about the experience?*
- *How has the experience changed the way you think about your future, or maybe any of your future plans?*

Additional Probes for Discussion:

- *Have any of you had any interesting conversations or built relationships with any adults outside of school during this internship? Tell us about them.*
- *What about your parents or family members? How do they feel about this?*
- *What about your friends at school? What do they think?*
- *Has anyone thought about the way your gender affects your internship?*
- *What about race? Has anyone thought about how that might come into play with all of this? How do you think it has it made a difference in what you have done with this program?*

Conclusion:

So, that concludes our focus group. Thank you so much for coming and sharing your thoughts and opinions with us. If you have additional information or think of anything that you did not get to say in the focus group, please feel free to reach out to me and let me know.

APPENDIX C**HIGH SCHOOL STUDENT WORKPLACE OBSERVATIONAL PROTOCOL**

Participant:

Date/Time:

Workplace Location:

General Setting:

Notes/Comments:

APPENDIX D

INTERNSHIP MONITORING AND REGISTRATION FORMS

CTE INTERNSHIP GUIDELINES

The following guidelines have been established to ensure protection of both the student intern and community sponsor.

Student Interns must complete at least 135 hours of work to receive credit for the internship course.

Student Interns are expected to conduct themselves as professionals including: appropriate dress, punctuality, conduct, and willingness to learn.

Student Interns are required to submit a **monthly time sheet signed by the site supervisor**. Time sheets are due in compliance with **INSERT DISTRICT NAME** Payroll schedule.

Student Interns may be compensated for their work at the community sponsor's discretion. However, Interns (paid or unpaid) may not displace regular employees as a source of labor.

Child Labor Laws must be observed with respect to acceptable work and hours.

The school's Internship Coordinator will make at least 1 visit and 1 phone call to the job site during the internship to observe the student in his/her internship role. These visits are usually unannounced and may occur at any time that the Intern is scheduled to work. Please contact the Internship Coordinator if you prefer to schedule visits.

The **site supervisor** is required to complete **two evaluations** for the Student Intern (midterm and final evaluation). These forms are included in this packet and should be returned at the time designated on each form.

NOTE: At the conclusion of each internship, students will be required to complete a portfolio that provides a detailed account of their experiences during the internship. HONOR students will be required to conduct a presentation to an internship committee.

All questions and concerns regarding Student Interns or the Internship Program should be directed to the **INSERT DISTRICT CONTACT NAME**.

Internship Coordinator Contact Information:

INSERT CONTACT NAME	INSERT CONTACT NAME	INSERT CONTACT NAME
----------------------------	----------------------------	----------------------------

Application for CTE Internship Program

STUDENT INTERN:

INTERNSHIP SITE REQUESTED:

Career Major (Select One):

Request for HONORS COURSE : Yes ☐ No ☐

- | | |
|---|---|
| <input type="checkbox"/> Agriculture, Food & Natural Resources
<input type="checkbox"/> Architecture & Construction
<input type="checkbox"/> Arts, A/V Technology & Communications
<input type="checkbox"/> Business, Management & Administration
<input type="checkbox"/> Finance
<input type="checkbox"/> Health Science
<input type="checkbox"/> Hospitality & Tourism | <input type="checkbox"/> Human Services
<input type="checkbox"/> Information Technology
<input type="checkbox"/> Manufacturing
<input type="checkbox"/> Marketing
<input type="checkbox"/> Science, Tech, Engineering & Math
<input type="checkbox"/> Transportation, Distribution & Logistics |
|---|---|

What is your career goal? How will an internship help you reach your career goal?

Where would you like to complete an internship?

Do you have means of transportation to your internship site? YES NO

Note: Internships through Career Technical Education are granted for students who meet eligibility requirements. Student interns are not guaranteed placement at an internship site but may request one based on career goals and prior experience. Student interns will receive a grade for the internship course that will appear on their high school transcript and calculate in their GPA.

Student Signature: _____ **Date:** _____

Parent Signature: _____ **Date:** _____

CTE INTERNSHIP STUDENT CONTRACT

STUDENT INTERN:
INTERNSHIP SITE:

I accept my share of responsibility for my internship and agree to maintain professionalism in both behavior and attendance. I agree to fulfill these requirements:

- I will **notify** my site supervisor and internship coordinator if I must be **absent** due to an accident or illness.
- I will **notify** my site supervisor and internship coordinator when I have any **problems** at the work site or personal problems that may affect my internship.
- I will conform to the regulations of the organization for which I am working (dress, conduct, etc.).
- I will abide by any regulations, practices and procedures of the CTE Internship Program of **INSERT DISTRICT NAME** not specifically stated in this document but outlined by the internship coordinator or school sponsor.
- I will agree to make every effort to fulfill the requirements of my position as an intern daily.
- I will not attempt to terminate this agreement without first discussing the decision with my internship coordinator and internship site supervisor.
- I will **submit** all required paperwork to my internship coordinator **on time** each month.
- I understand that I must complete 135 work hours to earn one high school credit during the current semester and that no incomplete grades will be granted.
- I will discuss my experiences as an intern with my parents/guardians.

I understand that I will be warned only once for failure to comply with this student contract. The next violation of this commitment will result in automatic termination of my internship.

Student Signature: _____ **Date:** _____

Parent Signature: _____ **Date:** _____

**CTE INTERNSHIP LIABILITY
RELEASE FORM****STUDENT INTERN:****INTERNSHIP SITE:**

As a student intern, I understand that the staff of the internship program and all community sponsors will make every effort possible to insure the health, safety, and welfare of all participants in the internship program. Despite all efforts and precautions, it must be anticipated that an emergency, illness or injury may affect students participating in the program.

Neither the community sponsor, internship site supervisor, internship program, employee or appointee thereof, **INSERT DISTRICT NAME**, nor any party, organization, or agency in collaboration with the internship program is or shall be liable for any injury, loss, damage, deviation, delay, or curtailment, however caused, or the consequences thereof, which may occur during any portion of this program.

Student Signature: _____ **Date:** _____

Parent Signature: _____ **Date:** _____

**CTE INTERNSHIP
TRAVEL PERMISSION****STUDENT INTERN:****INTERNSHIP SITE:****Please check all that apply:**

- ☐ I give my permission for my child to drive his/her own vehicle to and from the above named internship site.
- ☐ I give my permission for my child to be transported to and from the above-named internship site by private vehicle driven by another person.
- ☐ I give permission for my child to transport other students in his/her own vehicle to and from the above named internship site.

In granting permission for my student to be transported by private vehicle, I also give permission for necessary emergency treatment of my child in case of injury or illness.

Emergency Contact Phone(s)

Emergency Contact Phone(s)**Parent Signature:** _____ **Date:** _____

**CTE INTERNSHIP PROGRAM
STUDENT INTERN INFORMATION**

STUDENT NAME	
DATE OF BIRTH	
HOME ADDRESS	
STUDENT TELEPHONE	Home: _____ Cell: _____
STUDENT EMAIL	
PARENT/ GUARDIAN NAME/ RELATIONSHIP	
PARENT/ GUARDIAN TELEPHONE	Home: _____ Work: _____ Cell: _____

Medical Conditions or Health Concerns:

Additional Comments:

Student Signature: _____ **Date:** _____

Parent Signature: _____ **Date:** _____

CTE Internship Statement of Confidentiality

STUDENT INTERN:	STUDENT ID:
INTERNSHIP SITE:	

As an Intern from **INSERT DISTRICT NAME**, I understand that much of the information obtained during my internship is confidential in nature. Examples of confidential information include but are not limited to: business practices, client lists, employee demographics and salaries, proprietary information, student files, patient/ client/student counseling issues/concerns, medical diagnoses, agency referrals, criminal/arrests records, and financial holdings.

I understand that all such information obtained during my internship whether formally, informally, deliberately, or accidentally is to be held in complete confidence.

I further understand that my community sponsor and internship coordinator are available to discuss any concerns I may have regarding issues of confidentiality. Additionally, I know I am obligated to inform them of situations where a student/ client/patient may be in danger or pose a danger to themselves or others.

By signing this statement, I promise to honor this confidentiality policy. I understand that the credibility of the internship program will be directly affected by my adherence to this policy. I understand that a single breach of confidentiality will result in automatic termination of my internship and I will receive a grade of "fail" for this course.

Student Signature: _____ **Date:** _____

Parent Signature: _____ **Date:** _____

**INTERNSHIP PROGRAM
INTERNSHIP SITE INFORMATION**

STUDENT INTERN:	STUDENT ID:
------------------------	--------------------

COMPANY/ORGANIZATION	
SUPERVISOR	
ADDRESS	
TELEPHONE	
FAX	
EMAIL	

Student Intern job responsibilities/tasks:

Please provide detailed directions to your site:

Additional Comments:

Site Supervisor PRINTED NAME _____ **Date:** _____

Site Supervisor Signature: _____ **Date:** _____

CTE INTERNSHIP TIMESHEET FORM

Student Interns must complete a time sheet for each month of internship work. Time sheets must be signed by the internship site supervisor and are due on the first Friday of each month for the previous month's internship hours. Time sheets not submitted on time will not receive full credit on grading rubric. **You may use a company timesheet if approved by the site supervisor.**

STUDENT INTERN:	
INTERNSHIP SITE:	

[illegible]

TOTAL HOURS FOR MONTH:	
CUMMULATIVE HOURS:	

Site Supervisor Signature: _____ Date: _____

STUDENT INTERN:

INTERNSHIP SITE:

MONTH:

[illegible]

TOTAL HOURS FOR MONTH:	
CUMMULATIVE HOURS:	

Site Supervisor Signature: _____ Date: _____

CTE INTERNSHIP PORTFOLIO GRADING RUBRIC

Student Interns must complete a portfolio of their internship work. The portfolio will provide the evidence by which a student is assigned a grade for the course. The individual components of the portfolio and their respective values are listed below.

STUDENT INTERN:	STUDENT ID:
INTERNSHIP SITE:	

Item	Description	Point Value
1. Internship Forms:		20
○ Student Application and Contract	Full credit when Completed forms are to be turned in within the first 5 days from the start of the internship 6-10 days of start date = 3 points 11-20 days of start = 2 points 21-30 days of start = 1 point past 30 days = 0 points	4 3 2 1 0
○ Liability Release Form		4 3 2 1 0
○ Travel Permission		4 3 2 1 0
○ Student Intern Information		4 3 2 1 0
○ Internship Site Information and Confidentiality Form		4 3 2 1 0
2. Time sheets	Completed forms turned in as requested by teacher.	2 points deducted for each late timesheet 20
3. Evaluation Sheets		20
○ Mid-term	Completed form	10
○ Final	Completed form	10
4. Documentation of Work Experience		40
○ Written	Job description (5 points) Journal entries (5 points) List of skills learned (5 points) Industry research (5 points)	20
○ Visual	Photos, videos, multimedia representation of work experiences	20
TOTAL POINTS EARNED:		____ Out of 100 points

CTE INTERNSHIP PORTFOLIO GRADING RUBRIC

Student Interns must complete a portfolio of their internship work. The portfolio will provide the evidence by which a student is assigned a grade for the course. The individual components of the portfolio and their respective values are listed below.

STUDENT INTERN:	STUDENT ID:
INTERNSHIP SITE:	

Item	Description	Point Value
1. Internship Forms:		20
○ Student Application and Contract	Full credit when Completed forms are to be turned in within the first 5 days from the start of the internship 6-10 days of start date = 3 points. 11-20 days of start = 2 points 21-30 days of start = 1 point past 30 days = 0 points	4 3 2 1 0
○ Liability Release Form		4 3 2 1 0
○ Travel Permission		4 3 2 1 0
○ Student Intern Information		4 3 2 1 0
○ Internship Site Information and Confidentiality Form		4 3 2 1 0
2. Time sheets	Completed forms turned in as requested by teacher.	2 points deducted for each late timesheet 20
3. Evaluation Sheets		20
○ Mid-term	Completed form	10
○ Final	Completed form	10
4. Documentation of Work Experience		40
○ Written	Job description (5 points) Journal entries (5 points) List of skills learned (5 points) Industry research (5 points)	20
○ Visual	Photos, videos, multimedia representation of work experiences	20
TOTAL POINTS EARNED:		_____ Out of 100 points

APPENDIX E

IRB APPROVAL DOCUMENTS

Hello Mr./Mrs. _____

My name is Stan Winborne, and I am a doctoral student at the University of North Carolina at Greensboro. I am also the Director of High Schools and CTE for the school district. I'm calling this evening to ask your permission to participate in my dissertation research on how student internships impact their high school experience. The Superintendent of Granville County Public Schools has already approved this research proposal for any families who volunteer to participate.

The research would involve me interviewing you at your school in the office conference room. The interview will last about 45 minutes. I will check with your teachers to do my best to not disrupt valuable class time. I will ask you a set of standard interview questions in order to learn about your experience with the internship program in which you have participated. The interview will be audio recorded. To protect your confidentiality, I will not use your real name at any time. I will also not use the name of your school.

After I have transcribed the audio recording of the interview, I would like to get together again with you for approximately 30 minutes in order to make sure I captured your responses correctly, and to ask you any follow up questions I may have.

Following this interview, I will then ask you to participate in a focus group. This focus group will consist of an informal gathering of four to five other student participants so we can informally discuss your experiences in the internship program. This will last approximately 45-60 minutes and will take place at school during a time that is convenient to all of you and that will not interfere with your classes. This session will also be audio-recorded and transcribed, and will also follow the same level of confidentiality.

Also, you may also be asked to participate in a "job shadowing" exercise, in which I visit you at your place of work for the internship. During this one to two hour exercise, I will simply observe your activity while working at your internship site. I will take notes and will maintain the same level of confidentiality with this information.

Participation in this study is completely voluntary. If you should decide that you do not wish to participate during the course of my research, I will not use your interview in my research. Also, please know that there will not be any negative consequences for you not participating. Choosing not to participate or withdrawing from the study will in no way affect your grades or your relationship with the school or the school district.

Does this sound like something you would be willing to do?

If adult student agrees to participate – Thank you for agreeing to participate. I will need you to sign a written consent form before we can proceed. I can meet with you at school and we can complete the form together. I will make arrangements with the administrators at your school to conduct the interview. I will notify you once we are ready.

If adult student does not wish to participate – Thank you for your time. Have a good day.

Approved IRB
7/28/16

Hello Mr./Mrs. _____

My name is Stan Winborne, and I am a doctoral student at the University of North Carolina at Greensboro. I am also the Director of High Schools and CTE for the school district. I'm calling this evening to ask permission for your (daughter/son) to participate in my dissertation research on how student internships impact their high school experience. The Superintendent of Granville County Public Schools has already approved this research proposal for any families who volunteer to participate.

The research would involve me interviewing your (daughter/son) at their school in the office conference room. The interview will last about 45 minutes. I will check with their teachers to do my best to not disrupt valuable class time. I will ask them a set of standard interview questions. I can provide these questions to you if you wish. I will be asking these questions in order to learn about their experience with the internship program in which they have participated. The interview will be audio recorded. To protect their confidentiality, I will not use their real name at any time. I will also not use the name of the school your children attend.

After I have transcribed the audio recording of the interview, I would like to get together again with your daughter/son for approximately 30 minutes in order to make sure I captured their responses correctly, and to ask any follow up questions I may have.

Following this interview, I will then ask your son/daughter to participate in a focus group. This focus group will consist of an informal gathering of four to five other student participants so we can informally discuss their experience in the internship program. This will last approximately 45-60 minutes and will take place at school during a time that is convenient to all students and that will not interfere with their classes. This session will also be audio-recorded and transcribed, and will also follow the same level of confidentiality.

Also, your son/daughter may also be asked to participate in a "job shadowing" exercise, in which I visit them at their place of work for the internship. During this one to two hour exercise, I will simply observe their activity while working at their internship site. I will take notes and will maintain the same level of confidentiality with this information.

Participation in this study is completely voluntary. If you should decide that you do not wish for your (daughter/son) to participate during the course of my research, I will not use their interview in my research. Also, please know that there will not be any negative consequences for your child not participating. Choosing not to participate or withdrawing from the study will in no way affect your child's grades or your relationship of your child's relationship with the school or the school district.

Does this sound like something you would be willing to allow your (daughter/son) to do?

If parent agrees to participate – Thank you for agreeing to participate. I will need you to sign a written consent form and for your (daughter/son) to sign a written assent form before we can proceed. I can mail your permission form to you with a self-addressed stamped envelope to return them. Once I have that signed copy returned, I will meet with your son/daughter and get

Approved IRB

7/28/16

them to sign another assent form so they completely understand and agree to the process. Once I have both forms, I will make arrangements with the administrators at your (daughter/son) school to conduct the interview and follow up focus group. I will notify you once it is complete. Can you please confirm your mailing address?

If parent does not wish to participate – Thank you for your time. Have a good day.

Approved IRB

7/28/16

UNIVERSITY OF NORTH CAROLINA AT GREENSBORO**CONSENT FOR A MINOR TO ACT AS A HUMAN PARTICIPANT: LONG FORM**

Project Title: Ready for Work and Beyond: A Study of the Impact of Work-Based Experiences on Secondary Students

Principal Investigator and Faculty Advisor:

Stan Winborne, Director of High Schools/CTE & Public Information Officer;
Dr. Craig Peck,
Professor, UNCG

Participant's Name:

What are some general things you should know about research studies?

Your child is being asked to take part in a research study. Your child's participation in the study is voluntary. You may choose for your child not to join, or you may withdraw your consent for him/her to be in the study, for any reason, without penalty.

Research studies are designed to obtain new knowledge. This new information may help people in the future. There may not be any direct benefit to your child for being in the research study. There also may be risks to being in research studies. If you choose for your child not to be in the study or you choose for your child to leave the study before it is done, it will not affect your relationship or your child's relationship with the researcher or the University of North Carolina at Greensboro.

Details about this study are discussed in this consent form. It is important that you understand this information so that you can make an informed choice about your child being in this research study.

You will be given a copy of this consent form. If you have any questions about this study at any time, you should ask the researchers named in this consent form. Their contact information is below.

What is the study about?

This is a research project. Your child's participation in this project is voluntary. The purpose of this research is to investigate how student internships impact a student's high school experience. I am seeking to interview high school students who have participated in the internship experience so I can ask them a set of interview questions, participate in a focus group, and maybe visit them at their internship site. I will audio record these interviews and the focus group and then ask each student to review the transcript of the interview/focus group to check for accuracy, and allow him/her to change or edit any parts of the interview they want. This will be done in a brief follow-up meeting during the school day. Again, your child will not be pulled out of any critical instruction.

UNCG IRB
Approved Consent Form
Valid from:

7/28/16 to 7/27/17

Why are you asking my child?

I am asking your child because he/she has participated in an internship program at his/her high school.

What will you ask my child to do if I agree to let him or her be in the study?

I am asking to conduct a 30-45 minute face-to-face interview. The interview will take place at your child's school in the conference room adjacent to the front office. I will make an audio recording of the interview. I will conduct the interview during the school day, and will check with your child's teachers to ensure he/she does not miss any critical instruction or testing. If he/she misses instructional time, I will make sure that there is no negative impact.

After I have transcribed the audio recording of the interview, I would like to get together again with your child for approximately 30 minutes in order to make sure I captured his/her responses correctly, and to ask him/her any follow up questions I may have.

Following this interview, I will then ask your child to participate in a focus group. This focus group will consist of an informal gathering of four to five other student participants so we can informally discuss their experiences in the internship program. This will last approximately 45-60 minutes and will take place at school during a time that is convenient to all of the students and that will not interfere with their classes. This session will also be audio-recorded and transcribed, and will also follow the same level of confidentiality.

Also, I may also ask your child to participate in a "job shadowing" exercise, in which I visit him/her at his/her place of work for the internship. During this one to two hour exercise, I will simply observe his/her activity while working at his/her internship site. I will take notes and will maintain the same level of confidentiality with this information.

Is there any audio/video recording of my child?

Yes, I will audio record the interview and the focus group. I will use a fake name to label the recordings as to not directly link it to your child. Because your child's voice will be potentially identifiable by anyone who hears the tape, confidentiality for things said on the tape cannot be guaranteed although the researcher will try to limit access to the tape as described below.

What are the dangers to my child?

The Institutional Review Board at the University of North Carolina at Greensboro has determined that participation in this study poses minimal risk to participants. Things said in this interview will not be shared with the administration, other teachers, or other students. It will not affect his/her academic standing, nor will he/she receive any special recognition or compensation for participating in the interview.

If you have questions, want more information or have suggestions, please contact Stan Winborne who may be reached at (919) 691-5388 or by email at winbornes@gcs.k12.nc.us or my faculty

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advisor at UNCG, Dr. Craig Peck. He can be reached at 336-908-7262. His email is c_peck@uncg.edu

If you have any concerns about your child's rights, how he/she is being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

Are there any benefits to society as a result of my child taking part in this research?

The findings from this research may benefit the program designs for internships in your child's school district. It may also help administrators or other researchers better understand how these types of experiences impact students' prospects for success in high school and beyond.

Are there any benefits to *my child* as a result of participation in this research study?

There are no direct benefits to participants in this study.

Will my child get paid for being in the study? Will it cost me anything for my kid to be in this study?

There are no costs to you or payments to you or your child as a result of participation in this study.

How will my child's information be kept confidential?

Your child's name will not be directly connected or attached to the names of any of the electronic files, recordings or other data. A pseudonym will be used to protect their identity, and the name of the school and other identifying features will also be omitted from all documentation. A master list linking student names to the pseudonym will be kept on a password protected file on a designated flash drive kept in a locked filing cabinet in my office. All electronic files will be kept in a password-protected cloud storage account (UNCG Box account) that can only be accessed by me. All information obtained in this study is strictly confidential unless disclosure is required by law.

The data will be stored on my UNCG Box cloud storage account, both of which are password protected. The interviews will be audio recorded and the files will be deleted permanently from the digital recording device once they have been transferred to my Box account. All processes for data transfer and storage will follow the minimum requirements as described in the Level I Data Security Recommendations for the UNCG IRB process.

A master list will be kept linking the participant's name to their pseudonym. It will be on an password-protected Excel file, kept on a designated flash drive solely used for this purpose. I will be the only one with the password to open the file. The flash drive will be locked in my office filing cabinet. I am the only one who has the key. The file cabinet is located in my office which is locked when I am not present.

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I will use my UNCG Box account provided by the university to store all of the transcribed audio recordings, notes, and working drafts of my data analysis. The security statement for Box is listed below.

Security

While no service is completely secure, Box takes reasonable measures to help protect information about you from loss, theft, misuse and unauthorized access, disclosure, alteration and destruction. For example, we encrypt your Content when it is stored in our data centers. In addition, sensitive information such as credit card number and password that we request from you on the Box Services is protected with encryption, such as Secured Socket Layer (SSL) protocol, during transmission over the Internet.

The servers on which personal information is stored are kept in a controlled environment with limited access. While we take reasonable efforts to guard personal information we knowingly collect directly from you, no security system is impenetrable. In addition, we cannot guarantee that any passively-collected personal information you choose to include in documents you store on our systems are maintained at levels of protection to meet specific needs or obligations you may have relating to that information.

You may access your account information and our service only through the use of an individual user ID and password. To protect the confidentiality of personal information, you must keep your password confidential and not disclose it to any other person. Please advise us immediately if you believe your password has been misused. In addition, always logout and close your browser when you finish your session. Please note that we will never ask you to disclose your password in an unsolicited phone call or email.

Unless you have purchased a Box Enterprise subscription account or higher, you agree not to upload to or collaborate through the Box Services any Personal Health Information as defined by the Health Insurance Portability and Accountability Act of 1996 as amended (HIPAA).

What if my child wants to leave the study or I want him/her to leave the study?

You have the right to refuse to allow your child to participate or to withdraw him or her at any time, without penalty. If your child does withdraw, it will not affect you or your child in any way. If you or your child chooses to withdraw, you may request that any data which has been collected be destroyed unless it is in a de-identifiable state. The investigators also have the right to stop your child's participation at any time. This could be because your child has had an unexpected reaction, has failed to follow instructions, or because the entire study has been stopped.

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What about new information/changes in the study?

If significant new information relating to the study becomes available which may relate to your willingness allow your child to continue to participate, this information will be provided to you.

Voluntary Consent by Participant:

By signing this consent form, you are agreeing that you have read it or it has been read to you, you fully understand the contents of this document and consent to your child taking part in this study. All of your questions concerning this study have been answered. By signing this form, you are agreeing that you are the legal parent or guardian of the child who wishes to participate in this study described to you by _____.

Participant's Parent/Legal Guardian's Signature

Date: _____

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THE UNIVERSITY of NORTH CAROLINA
GREENSBORO

OFFICE OF RESEARCH INTEGRITY
2718 Beverly Cooper Moore and Irene Mitchell Moore
Humanities and Research Administration Bldg.
PO Box 26170
Greensboro, NC 27402-6170
336.256.0253
Web site: www.uncg.edu/orc
Federalwide Assurance (FWA) #216

To: Stan Winborne
Ed Ldrship and Cultural Found
Ed Ldrship and Cultural Found

From: UNCG IRB



Authorized signature on behalf of IRB

Approval Date: 7/28/2016
Expiration Date of Approval: 7/27/2017

RE: Notice of IRB Approval by Expedited Review (under 45 CFR 46.110)
Submission Type: Initial
Expedited Category: 6.Voice/image research recordings,7.Surveys/interviews/focus groups
Study #: 16-0195
Study Title: Ready for Work and Beyond: A Study of the Impact of Work-Based Experiences on Secondary Students

This submission has been approved by the IRB for the period indicated. It has been determined that the risk involved in this research is no more than minimal.

Study Description:

The purpose of this study is to explore how Career & Technical Education work-based experiences (commonly known as CTE Internships) impact attitudes and perceptions of secondary students.

Regulatory and other findings:

- This research, which involves children, meets criteria at 45 CFR 46.404 (research involving no greater than minimal risk). Permission of one parent or guardian is sufficient.

Investigator's Responsibilities

Federal regulations require that all research be reviewed at least annually. It is the Principal Investigator's responsibility to submit for renewal and obtain approval before the expiration date. You may not continue any research activity beyond the expiration date without IRB approval. Failure to receive approval for continuation before the expiration date will result in automatic termination of the approval for this study on the expiration date.

Signed letters, along with stamped copies of consent forms and other recruitment materials will be scanned to you in a separate email. **Stamped consent forms must be used unless the IRB has given you approval to waive this requirement.** Please notify the ORI office immediately if you have an issue with the stamped consents forms.

You are required to obtain IRB approval for any changes to any aspect of this study before they can be implemented (use the modification application available at <http://integrity.uncg.edu/institutional-review-board/>). Should any adverse event or unanticipated problem involving risks to subjects or others occur it must be reported immediately to the IRB using the "Unanticipated Problem-Adverse Event Form" at the same website.

Please be aware that valid human subjects training and signed statements of confidentiality for all members of research team need to be kept on file with the lead investigator. Please note that you will also need to remain in compliance with the university "Access To and Retention of Research Data" Policy which can be found http://policy.uncg.edu/university-policies/research_data/.

CC:
Craig Peck, Ed Ldrship and Cultural Found

UNIVERSITY OF NORTH CAROLINA AT GREENSBORO

CONSENT TO ACT AS A HUMAN PARTICIPANT

Project Title: Ready for Work and Beyond: A Study of the Impact of Work-Based Experiences on Secondary Students

Principal Investigator and Faculty Advisor:

Stan Winborne

Director of High Schools/CTE & Public Information Officer, Granville County Public Schools;

Dr. Craig Peck

Professor, UNCG

Participant's Name: _____

What are some general things you should know about research studies?

You are being asked to take part in a research study. Your participation in the study is voluntary. You may choose not to join, or you may withdraw your consent to be in the study, for any reason, without penalty.

Research studies are designed to obtain new knowledge. This new information may help people in the future. There may not be any direct benefit to you for being in the research study. There also may be risks to being in research studies. If you choose not to be in the study or leave the study before it is done, it will not affect your relationship with the researcher or the University of North Carolina at Greensboro.

Details about this study are discussed in this consent form. It is important that you understand this information so that you can make an informed choice about being in this research study.

You will be given a copy of this consent form. If you have any questions about this study at any time, you should ask the researchers named in this consent form. Their contact information is below.

What is the study about?

This is a research project. Your participation is voluntary. The purpose of this research is to learn about how student internships impact their high school experience. I am seeking to have conversations with individuals who have participated in work-based student internships. I will audio record these interviews so I may refer back to them at a later time.

Why are you asking me?

I am asking to interview you because you are or have participated in an internship program.

What will you ask me to do if I agree to be in the study?

The research would involve me interviewing you at your school in the office conference room.

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The interview will last about 45 minutes. I will check with your teachers to do my best to not disrupt valuable class time. I will ask you a set of standard interview questions in order to learn about your experience with the internship program in which you have participated. The interview will be audio recorded. To protect your confidentiality, I will not use your real name at any time. I will also not use the name of your school.

After I have transcribed the audio recording of the interview, I would like to get together again with you for approximately 30 minutes in order to make sure I captured your responses correctly, and to ask you any follow up questions I may have.

Following this interview, I will then ask you to participate in a focus group. This focus group will consist of an informal gathering of four to five other student participants so we can informally discuss your experiences in the internship program. This will last approximately 45-60 minutes and will take place at school during a time that is convenient to all of you and that will not interfere with your classes. This session will also be audio-recorded and transcribed, and will also follow the same level of confidentiality.

Also, you may also be asked to participate in a "job shadowing" exercise, in which I visit you at your place of work for the internship. During this one to two hour exercise, I will simply observe your activity while working at your internship site. I will take notes and will maintain the same level of confidentiality with this information.

Is there any audio/video recording?

Yes, I will audio record the interview and the focus groups. I will only use this recordings as a reference for my personal use. Because your voice will be potentially identifiable by anyone who hears the recording, your confidentiality for things you say on the recording cannot be guaranteed although I will try to limit access to the recording as described below.

What are the risks to me?

The Institutional Review Board at the University of North Carolina at Greensboro has determined that participation in this study poses minimal risk to participants. Things said in the interview will not be shared with the administration, other teachers, or other students. It will not affect your academic standing, nor will you receive any special recognition or compensation for participating in the interview.

If you have questions, want more information or have suggestions, please contact me, Stan Winborne who may be reached at (919) 691-5388 or by email at winbornes@gcs.k12.nc.us or please contact my faculty advisor at UNCG, Dr. Craig Peck. He can be reached at 336-908-7262. His email is c_peck@uncg.edu

If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

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Are there any benefits to society as a result of me taking part in this research?

The findings or implications for this research may benefit how work based learning experiences impact secondary students.

Are there any benefits to *me* for taking part in this research study?

There are no direct benefits to participants in this study.

Will I get paid for being in the study? Will it cost me anything?

There are no costs to you or payments to you as a result of participation in this study.

How will you keep my information confidential?

Participant names will not be directly connected or attached to the names of any of the electronic files, recordings or other data. A pseudonym will be used to protect their identity, and the name of the school and other identifying features will also be omitted from all documentation. A master list linking student names to the pseudonym will be kept on a password protected file on a designated flash drive kept in a locked filing cabinet in my office. All electronic files will be kept in a password-protected cloud storage account (UNCG Box account) that can only be accessed by me. All information obtained in this study is strictly confidential unless disclosure is required by law.

The data will be stored on my UNCG Box cloud storage account, both of which are password protected. The interviews will be audio recorded and the files will be deleted permanently from the digital recording device once they have been transferred to my Box account. All processes for data transfer and storage will follow the minimum requirements as described in the Level I Data Security Recommendations for the UNCG IRB process.

A master list will be kept linking the participant's name to their pseudonym. It will be on an password-protected Excel file, kept on a designated flash drive solely used for this purpose. I will be the only one with the password to open the file. The flash drive will be locked in my office filing cabinet. I am the only one who has the key. The file cabinet is located in my office which is locked when I am not present.

I will use my UNCG Box account provided by the university to store all of the transcribed audio recordings, notes, and working drafts of my data analysis. The security statement for Box is listed below.

Security

While no service is completely secure, Box takes reasonable measures to help protect information about you from loss, theft, misuse and unauthorized access, disclosure, alteration and destruction. For example, we encrypt your Content when it is stored in our data centers. In addition, sensitive information such as credit card number and password that we request from you on the Box Services is protected with encryption, such as Secured Socket Layer (SSL) protocol, during transmission over the Internet.

The servers on which personal information is stored are kept in a controlled environment with limited access. While we take reasonable efforts to guard personal information we knowingly

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collect directly from you, no security system is impenetrable. In addition, we cannot guarantee that any passively-collected personal information you choose to include in documents you store on our systems are maintained at levels of protection to meet specific needs or obligations you may have relating to that information.

You may access your account information and our service only through the use of an individual user ID and password. To protect the confidentiality of personal information, you must keep your password confidential and not disclose it to any other person. Please advise us immediately if you believe your password has been misused. In addition, always logout and close your browser when you finish your session. Please note that we will never ask you to disclose your password in an unsolicited phone call or email.

Unless you have purchased a Box Enterprise subscription account or higher, you agree not to upload to or collaborate through the Box Services any Personal Health Information as defined by the Health Insurance Portability and Accountability Act of 1996 as amended (HIPAA).

What if I want to leave the study?

You have the right to refuse to participate or to withdraw at any time, without penalty. If you do withdraw, it will not affect you in any way. If you choose to withdraw, you may request that any of your data which has been collected be destroyed unless it is in a de-identifiable state. The investigators also have the right to stop your participation at any time. This could be because you have had an unexpected reaction, or have failed to follow instructions, or because the entire study has been stopped.

What about new information/changes in the study?

If significant new information relating to the study becomes available which may relate to your willingness to continue to participate, this information will be provided to you.

Voluntary Consent by Participant:

By signing this consent form, you are agreeing that you have read, or it has been read to you, and you fully understand the contents of this document and are openly willing consent to take part in this study. All of your questions concerning this study have been answered. By signing this form, you are agreeing that you are 18 years of age or older and are agreeing to participate, in this study described to you by Stan Winborne.

Signature: _____ Date: _____

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Assent for Minors 12-16

Project Title: Ready for Work and Beyond:

A Study of the Impact of Work-Based Experiences on Secondary Students

Principal Investigator: Stan Winborne

Why am I here?

We want to tell you about a research study we are doing. Research studies are done to find better ways of helping and understanding people or to get information about how things work. In this study we want to find out more about how high school students feel about participating in internships. You are being asked to be in the study because you have participated in the internship program. In a research study, only people who want to take part are allowed to do so.

WHAT WILL HAPPEN TO ME IN THIS RESEARCH STUDY?

If it is okay with you and you agree to join this study, then basically, I will interview you for about 30-45 minutes. The interview will include questions about your experiences with the CTE internship that you have participated in. I want to learn more about how this internship impacted you and your feelings about high school and your future. The interview will take place at your school, in the conference room near the front office. I will schedule a time that won't keep you from something important in one of your classes. I will audio record the interview, then make a paper copy of what we say. I will then show you that copy at a later date for you to make sure it correctly shows what was said in the interview.

Following this interview, I will then ask you to participate in a focus group. This focus group will consist of an informal gathering of four to five other student participants so we can informally discuss your experiences in the internship program. This will last approximately 45-60 minutes and will take place at school during a time that is convenient to all of you and that will not interfere with your classes. This session will also be audio-recorded and transcribed, and will also follow the same level of confidentiality.

Also, you may also be asked to participate in a "job shadowing" exercise, in which I visit you at your place of work for the internship. During this one to two hour exercise, I will simply observe your activity while working at your internship site. I will take notes and will maintain the same level of confidentiality with this information.

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HOW LONG WILL I BE IN THE RESEARCH STUDY?

You will be in this study for only about 30-45 minutes for the interview. I will follow up with you later to show you a paper copy of everything that was recorded and allow you to make any changes. That part should only take 30 minutes or less.

The focus group should take about 60 minutes. If I ask you to participate in the job shadowing, then that will take one or two hours.

CAN ANYTHING BAD HAPPEN TO ME?

No. We are just going to talk about your experience with the internship program. The questions will only be about that experience and how you felt about it. If at any time you are uncomfortable with some of the questions, you can let me know and we will stop or do whatever we can to make you feel better. You might miss class time when I interview you, but I will make sure that your teacher(s) and your principal are okay with this, and that you won't miss anything that you can't catch up on later without too much difficulty.

CAN ANYTHING GOOD HAPPEN TO ME IN THIS RESEARCH STUDY?

We do not know if you will be helped by being in this project. However, we may learn something that will help other children how the internship program can help other students in the future.

DO I HAVE OTHER CHOICES?

You do not have to be in this study. You can choose not to participate.

WHAT IF I DO NOT WANT TO BE IN THIS RESEARCH STUDY?

You do not have to be part of this project. It is up to you. You can even say okay now, but change your mind later. All you have to do is tell us. No one will be mad at you if you change your mind.

WHAT ABOUT MY CONFIDENTIALITY?

We will do everything possible to make sure that your data and or records are kept confidential. Unless required by law, only the following people can review your research records: me, the Principal Investigator; and, my UNCG Faculty Advisor, Dr. Craig Peck. We are both required to keep your personal information confidential.

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WILL I BE PAID FOR BEING IN THIS RESEARCH STUDY?

You will not be paid for participating in this study.

DO MY PARENTS KNOW ABOUT THIS RESEARCH STUDY?

This study has been explained to your parent/parents/guardian and they have given permission for you to be in it.

WHAT IF I HAVE QUESTIONS?

You can ask me, Stan Winborne anything about the study. My contact information is (919) 693-4613 and my email is winbornes@gcs.k12.nc.us or you can call the Director in the UNCG Office Research Integrity at 336-256-1482 or 855-251-2351. My faculty advisor at UNCG is Dr. Craig Peck and he can be reached at 336-908- 7262. His email is c_peck@uncg.edu

ASSENT

This study has been explained to me and I am willing to be in it.

Child's Name (printed) and Signature

Date

Check which applies below *[to be completed by the person obtaining the assent]*

- ☐ The child is capable of reading and understanding the assent form and has signed above as documentation of assent to take part in this study.
- ☐ The child is not capable of reading the assent form, but the information was verbally explained to him/her. The child signed above as documentation of assent to take part in this study.

Signature of Person Obtaining Assent

Date

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